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ABSTRACT

A study was made of the current status of exploratory or early field experience programs to evaluate their effectiveness and make recommendations relative to their use in teacher education programs. Four monographs resulting from the study are presented. The first categorizes the implicit and explicit rationales for field experiences in other professional preparation programs. A review is given of programs in the fields of law, allied health care, and business administration. The second monograph examines the concept of direct, personal, contingent experience as a foundation for learning in a field setting. The cognitive development processes are examined, and the theories of educational psychology are applied to the teaching and learning processes in field experience programs. The third monograph presents the results of a large-scale survey of teacher education institutions which have early field experience programs in their curriculum. The final monograph offers conclusions, recommendations, and suggested standards for implementing exploratory field experience programs. (JD)

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EXPLORATORY FIELD EXPERIENCES

IN

TEACHER EDUCATION

A Report of the Commission on Exploratory Field Experiences

of

The Association of Teacher Educators

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Exploratory Field Experiences in Teacher Education

Introduction

In a recent paper, Kevin Ryan¹ refers to the continuing debate over the relative merits of educational theory vs. field experiences in teacher preparation programs as an "ancient and honored professional dispute."

(p. 6) The following report from ATE's Commission on Exploratory Field Experiences provides additional material to carry on that debate.

The Commission was established in 1977 by then-President Marvin Henry to accomplish the following: 1) study the current status of exploratory or early field experience programs, 2) evaluate the effectiveness of such experiences for teacher preparation programs, and 3) make recommendations relative to the use of field experiences in teacher education.

The following definition was developed by the Commission: Exploratory Field Experiences are those pre-service education activities, sponsored by the training institution, which occur typically (but not exclusively) in non-university/college environments and which precede student teaching or intern experiences. "Exploratory" includes, but is not limited to, activities relating to career decision making. "Field experiences" include, but are not limited to, activities such as observing, preparing materials, instructing in small groups or large groups, tutoring, and evaluating. Field settings include sites, typically off-campus, for example, in schools, businesses, and other settings, approved by the training institution.

Dr. Ronald Hash, Ball State University, Indiana, was the first chair of the group and did the essential foundation work. He relinquished

¹Ryan, K., and others, "My Teacher Education Program? Well---?" First Year Teachers Reflect and React." The Ohio State University College of Education, February, 1978. ERIC Document No. ED 168 968.

Commission leadership in 1978 and Dr. Clark Webb of Brigham Young University was named chair. The Commission worked at the national ATE meetings (Las Vegas, Orlando and Washington) and by correspondence and telephone, until February of 1980 when the members' terms expired. Inasmuch as the Commission had produced a body of work including theory and research, the decision was made to form an editorial committee to bring together in a single publication this material. The present volume is that publication.

The intent of this report is to provide the following: 1) extensive data from the United States about the nature and organization of early field experience programs in teacher education; 2) an examination of the theoretical and conceptual base for field experiences; and 3) recommendations and standards for exploratory field experience programs. Much of the information contained in the report is not available anywhere else, and while it cannot be considered as providing answers to vexing questions about the most appropriate use of field experiences, it does illuminate an area of training generally considered central to the enterprise of educating teachers.

Many persons other than the editorial committee have contributed to this publication. Our thanks go to all members of the Commission who shared their knowledge and energy, and particularly to Dr. Richard Kay, Brigham Young University.

--Editors

Commission on Exploratory Field Experiences (1978-1980)

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Chapter 1

Rationales for Field Experiences in the Professions

Nathalie Gehrke

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Professional preparation practices show striking similarities across the helping services. No doubt foolish fads as well as programs of long standing have made their way from one area to the next. At times, too, pressures from the greater society have influenced curriculum planners in several professions to "innovate" highly similar programs. Take, for example, the growth of competency-based programs in many fields.

The inclusion of early, sometimes extensive, field experiences is a second practice to have emerged in a number of professional preparation programs. Rationales for the inclusion of these field experiences in the various programs reveal both similarities and differences worthy of note by program planners. Our goal here is to categorize the implicit and explicit rationales for field experiences that were found in the literature of a number of professional preparation programs, then to offer some implications for program planning in the helping services.

Each preparation program offered by a professional school must be assumed to have explanations for its form and substance. Yet the literature which purports to describe the programs often yields few explicit statements of rationale. Attempts to analyze the field-experience offerings in the helping services are hindered also by the spotty reporting of programs currently underway. Sexton and Ungerer (1975) lamented the "limited quality and slim quantity of literature dealing with the conceptual framework of experiential education" (p.2). Likewise, Keeton (1977) mentioned that

"...there is not available even a reasonable useful overview of the scope and nature of experiential education in the United States today." Generally such authors include within this "experiential education" those programs and activities referred to as field experiences, clinical experiences, laboratories, cooperatives, internships, and practicums. They also refer to supervised programs, not learning through living.

A review of reports of preparation programs in the fields of law, allied health care, business administration, and teacher education generated six major categories of field experience rationales. They are a) learning theory, b) motivation, c) vocational choice, d) economics, e) socio-politics, f) institutional revitalization. These categories will serve as organizers for the following discussion.

Field Experience for Learning the Role

Perhaps the first observation one can make after surveying the literature of the selected professions is that there is nearly universal acceptance of the value of field experiences for learning. The belief in the utility of in-context experiencing in learning is so widely held that:

...there is virtually no work of serious research, statistical or otherwise, analyzing experiential education and relating it to programmatic goals: instead we are faced with a literature tending toward broader philosophical statements.
(Sexton and Ungerer, 1975, p. 5)

In the past the line of thinking was that application of theory in the real world setting was necessary for permanence of learning. Thus, once classroom work was completed, students were sent out to practice what they had been taught. A strong tendency to view clinical experiences as the application phase of this theory first-- apply/practice later mode of learning is still in evidence (Warner, 1976). The tendency is particularly pronounced in

those numerous instances where field experiences are not scheduled until the latter phases of training. Reports from all the professions considered here indicated that this later offering is still the most common, though early field experiences are increasing.

The emerging learning effectiveness rationale for the inclusion of field experiences presents a different perspective. It is that although in the classroom we may learn to incorporate new symbols into our verbal repertoire, for those new symbols (words) to have personal, significant meaning for us, we must be provided with so-called "contextual" experience of the realities underlying the ideas being taught. Those contexts will be best which most closely approximate the contexts in which we will later have to use our constructive reality to function, i.e., the "field." (See Webb, Chapter 2 herein)

In spite of the paucity of specific research in support of this rationale and the subsequent field-based programs it engenders, a growing body of literature, including both empirical and theoretical considerations, exists to lend credence to the practice. Four education related fields, following converging lines of inquiry, have been shown to offer support for the inclusion of early field experiences in preparation programs (Webb, Chapter 2, herein). They are: semantics, developmental/cognitive psychology, applied social psychology, and research on learning and the human brain.

Essentially, research and theoretical constructs in all four areas of inquiry conclude that verbal teaching alone or verbal teaching prior to learner experience with the referents of the desired conceptual learning will be less productive than direct contextual experience followed by concept-forming discussion (Argyris, 1976; Ogden & Richards, 1938; Piaget, 1972; Woodruff, 1967). In the absence of the sensory input of contextual experience,

the human organism fails to acquire some stabilizing order. Without this structure (possibly neurologic) the organism is not allowed to generalize and make all sensory and verbal data relevant to its intentions in the learning situation (Wittrock, 1978).

Field Experience for Motivation

Implicit in the findings of the studies of learning in these other fields, is the centrality of the learner's intentions. Learner involvement in the structuring of experience is necessary for conceptual learning (Kapfer & Woodruff, 1972). This involvement is more frequently called 'motivation' in teacher education and is often discussed as an issue quite separate from the learning act itself. One hears that being in the field "makes the students want to learn" the skills of teaching because they need them in order to act responsibly in the field setting.

Until recently the professions outside of education made little or no explicit mention of learner motivation as a basis for rationalizing the inclusion of field experiences in their programs. Now, however, some law educators have admitted that law course work is, by itself, extremely tedious study with little intrinsic motivational value. Acknowledgement of this tedium and the need to combat it has been used by some to support early and frequent field experience for law students (Bergman, 1978).

Field Experiences for Vocational Choice

Teacher educators have shown some leadership in their willingness to consider "career exploration" as an important rationale when planning field experiences. They have readily acknowledged the fact that not everyone who begins a preparation program in teacher education will want to finish it. Subsequently, they have tried through field programs to give students an exploratory experience on which to base their career choice.

The need for early career exploration through field experiences seems to be a relatively new perspective in law and certain health care fields, however. La Duca and Madigan (1976) concluded that nearly all clinical experiences in the allied health professions (such as medical dietetics, medical record administration, and medical, physical and occupational therapy) still occurred after half of the program was over, and frequently in the very last semesters. Legal education and pharmacy education programs present the same picture (Leleiko, 1972; Chalmers, 1973). These allied health, law and pharmacy educators agree that because of the lack of early field experience many students in their programs do not have the slightest idea of what the profession is really about.

Field Experiences for Economy

Those of us who "do" professional education for a living tend to look for cognitive, motivational, and vocational reasons for the inclusion of field components in any professional preparation programs. We do things in our preparation programs, so we claim, because students will learn better, like it more, and/or make career choices with which they will be happier. This perspective seems to ignore other bases for practices that other professions are likely to address. We are thinking here most specifically of the political and economic rationales presented on behalf of field-based education components by those in law, health care and business.

Gordon, Hadac, and Smith (1977) explained the economics of the rapid rise in early field experiences in health care this way:

Various cost control programs and advances in medical technology have reduced the number of hospital teaching cases available. At the same time demands for greater availability of health care have markedly increased medical school enrollments. Finally, the rising costs of medical education have made the bedside teaching

approach formerly preferred by medical school faculty an expensive luxury. A partial answer to these demands has been found by sending medical students beyond the walls of the university medical center for portions of their training. (p. 888)

Economics probably play a large role in the institution of field-based components in many professional preparation programs including teacher education, but they are not readily cited as an important reason for use. The current teacher education literature rarely, if ever, acknowledges that money may be involved in the decision to provide clinical experiences in the field rather than in campus laboratory schools or simulated environments.

Field Experience to Meet Community Needs

Recent reports of clinical programs in law and business have declared community need for service as a basis for offering field experiences to students. In each of these fields exists a belief in the necessity of providing legal aid or business assistance to all in the community, regardless of financial status, because to fail to do so would make a mockery of the concept of democratic government with justice for all. Pincus (1969) held that "Clinical legal education can provide the manpower, student and faculty, for cleaning up many of these foul (judicial) situations...." (p.17). Such an attitude has compelled some law and business schools to include practica and internships when they might not otherwise have done so (Leteiko, 1972; Peden, 1972; Wish, 1975).

This social consciousness does not appear to have greatly affected the rationale statements for field-based programs in teacher education. Student aides and student teachers are of considerable help in classrooms plagued by overcrowding and lack of funds for personnel, but this fact does not seem to appear in print as a justification for increased field programs.

Likewise, the literature of health care preparation programs appears to make little mention of the importance of student interns in the care of the indigent and needy. Yet we are aware of the critical role interning medical personnel play in public health facility operation.

Shirk (1977), in comparing educational policy of several countries, remarked on the significant lack of a U.S. national policy requiring students engaged in professional training to contribute concurrently to solving national and local problems. Social consciousness is not consistently advocated or developed, but rather allowed to occur if socially conscious program planners include it. On the other hand China and several other countries have placed work experience central to national policy in order to solve problems of national significance.

Field Experience to Revitalize Scholarly Activity

A final basis for student field experience appears throughout the literature. It is that placing students in actual work situations draws professional educators into the field in a way that helps the educators revitalize themselves and their teaching and helps generate new knowledge.

Pincus (1969) stated rather poetically that through field experiences:

...legal education can discard its tendency to atrophy and substitute a living branch which holds the promise of a continuous source of vital material for teaching, research, and service. (p. 17)

When new programs are described, this revitalization is not the sole reason offered for inclusion of field experiences in preparation programs. It is, in fact, more likely to be mentioned as an unplanned, though fortunate, effect. Yet when programmatic practices are maintained beyond pilot stage, knowledge of this effect certainly becomes part of the unwritten rationale.

These then appear to be the major rationales used by the various professions for their inclusions of field-based programs:

1. It is educationally efficient because learning of appropriate realities is enhanced.

2. It is motivationally superior because students are personally involved in the outcome of their efforts in real world settings.

3. It is vocationally sound because it facilitates career choice and commitment.

4. It is economically more feasible than more closely controlled intramural laboratory experiences.

5. It is socio-politically more generous for it provides inexpensive or free labor to meet community or national needs.

6. It is academically stimulating to knowledge generation by current practitioners and theoreticians.

No one rationale base appears only in the literature of a single profession. Rather there are traces of two or more perspectives in each body of professional literature. No doubt, certain bases are likely to receive greater or lesser focus from the professions as general social issues change. This is true especially where career, economic, and community needs-based rationales are concerned.

Implications for Practice

This tracing of rationale categories may provide some guidelines for more systematically developing rationales for future programs in the helping services. By focusing on the six potential rationale elements we may more carefully examine and report the bases upon which our own programs rest. For instance, those professions that have heretofore ignored social issues

might be drawn into an open consideration of them if made aware of their potential and legitimacy. Likewise, those who have paid little heed to the motivational and career choice rationales might be led to consideration of them. Although later some might still choose to emphasize certain bases for program development rather than others, the opportunity for open reflective consideration will have been provided.

Such open consideration allows, though it does not assure, benefits in two areas. First, the examination and clarification of bases for program development should allow clearer statement of goals. Clear goals increase the likelihood that subsequent programs will reach those goals.

A second benefit derived from openness is that the programs are not only more likely to achieve the purposes, but are likely to do so more ethically. Programs whose rationales are hidden from the planners and, more importantly, the potential students, are unintentionally deceptive. They fail to provide participants the opportunity to consider thoughtfully the kind of preparation they are undertaking and the effects it may have on their lives. Certainly the opportunity to consider the personal ramifications of involvement in a program is something educators owe their students.

Statements of rationale should not be just so much verbiage tacked on the document of programs. They should be clear guidelines for planners and learners to use as they develop or consider participation in preparation programs. Generation of useful rationale statements is an arduous endeavor; educators from all the helping professions are fortunate to be able to turn to each other for guidance in the development of rationale statements that reflect the careful thought of the planners.

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Chapter 2

Theoretical and Empirical Bases for Early Field Experiences in Teacher Education

Clark D. Webb

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As documented in this monograph, the incidence of field-related teaching and learning is increasing in teacher education and related professions. Nevertheless, while admonitions abound to get learners into the "field," a clear rationale justifying the admonitions generally is not offered. My intent in this chapter is to demonstrate that although the literature of teacher education does not identify such a rationale, several lines of inquiry within other, related, disciplines do provide convincing evidence of the value of early field experiences for preservice teachers.

The reader will note that the concept "early field experiences for preservice teachers" is one specific example--germane to a particular profession--of a larger concept, viz., direct, personal, contingent experience. What is being looked at in this monograph is the application (or lack of same) by teacher educators of the principle of direct experience for learning. In expanded form the principle may be stated as follows: the initial step in learning ought to be personal experience in the context of what it is intended the learner should master, where such direct contact with the referent has not been had prior to the teaching/learning setting.

Statements such as the following are common in the literature of teacher education--and have been for decades:

". . . [T]he [beginning] teacher ought to have an early experience in a natural situation, with all its tacit messages for her." (Fuller and Bown, 1975, p. 52)

[Teacher training] programs would be vastly improved if clinical, laboratory and practicum experiences were provided continuously and for the purpose of developing knowledge as well as demonstrating its possession. (Lindsey, 1978, p.8)

According to the survey completed by the Association of Teacher Educators through its Commission on Exploratory Field Experiences (see Ishler and Kay, this monograph), educators are indeed following recommendations such as the above. There is little doubt but what the practice is pervasive in U.S. preservice teacher education programs. However, when thoughtful educators ask, "On what grounds is the practice undertaken?", they are not led to a conveniently accessible body of data focused on teacher education. Nevertheless, I believe a substantial body of theoretical and empirical literature exists to support the practice. That practitioners seem to be unaware of the material may explain, at least in part, the somewhat fuzzy approach to goals and purposes for exploratory field experiences found in the Ishler and Kay survey reported in Chapter 3.

Learning and Teaching

The fields investigated as to their possible illumination of the question of early or exploratory field experiences in teacher education are fields related to the psychology of learning. Why these fields are considered relevant to teaching teachers may be understood from the following. Although other views are possible, it seems to me that the most intelligent way to consider teaching is as the complementary activity to learning. That is, knowledge about learning implies guidelines for teaching (Erickson 1967, Gagne 1976; Tyler 1976). What students need in order to learn is what teachers ought to provide. Now, the question for teacher educators is, How does one learn to do teaching? I believe learning to teach implies the progressive modification of patterns of behavior--teaching behavior. Two characteristics

of this learning impinge in special ways on the teaching of it: it is complex and it is interpersonal or social to a substantial degree. Doing this complex act effectively results not from simply memorizing rules or facts, but from an interplay between 1) personally relevant experiences and 2) verbal learning built on that experiential base. Said directly, the learning on which teaching is based is conceptual--as contrasted to conditioned, motor, rote or habitual.

In this chapter I define concepts as relatively complete ideas about people, events, processes and qualities, or combinations of these categories, that include attitude or affect, i.e., value (Woodruff, 1964; Anglin 1977, p. 3; Kaplan 1964, p. 46). They are "representational structures [of the brain] that are more fundamental than language" (Attneave 1974, p. 496). A concept is "...a disposition to organize events in a certain way." (Bolton, 1977, p. 46).

Converging Lines of Inquiry Supporting Field Experiences

The enterprise of conceptual ordering of real-life phenomena is risky.

Paul Brandwein (1966) once wrote:

We seem always to be seeking simplified editions of vast and complicated matters. We seek to make sense. We want, wherever it is intellectually possible, to bring all ideas under one roof. Our need to seek relationships, to see structure, is almost always appealing, often engaging, often dangerous; nevertheless, it is with us. (p. 1)

Willing to accept the risk pointed out by Brandwein, I have examined published research, theory statements, and interpretive (of original sources) works bearing on learning or on learning and its implications for teaching. Four fields related to education offer, in my judgment, converging lines of inquiry, resulting in similar implications for the practice of educating teachers.

Three of the four lines of inquiry are within or directly related to the psychological sciences: Cognitive/Developmental Psychology, Applied Social Psychology and Research on Learning. The fourth, Semantics, is indirectly related (through Linguistics) to Psychology. I will examine the fourth field of inquiry first. As will be evident to any student of these disciplines, only a fractional portion of the relevant material available in each of them has been included.

Semantics

Perhaps unexpected by many teacher educators, the basic assertions within the field of Semantics offer logical support for the practice of field experiences. In a classic work, Ogden and Richards (1938) examined the relations which hold among three aspects of a typical teaching-learning setting: the concept or idea to be learned, the words which describe that idea or thought, and the object (or event, process or person) to which the thought refers. Their major finding is that between the real-world event, object, etc., and the words or symbols used to refer to that reality, there is only an indirect relation. That is, the words do not automatically call up the representation of their referent, nor does the event or object automatically communicate its verbal symbol to us. A famous dictum of Semantics puts it thus, "the word is not the thing." This principle proposes that reliance on verbal symbols only, neglecting learner contact with the reality symbolized, will lead to imprecise and confused understanding. The significance of this assertion for the education of teachers consists in its implication that telling a prospective teacher how to teach, without involving him or her with the referent for teaching--encounters with real pupils--will stunt his or her conceptual growth, although it may not stunt vocabulary growth.

Johnson (1960) writes of two "worlds" we inhabit:

There is the world of things we touch, see, hear,
or otherwise experience. . .and. . .there is the world
of words--a verbal world--containing verbal crystalli-
zations of our experience and models built of the
words we read and hear.

When we act as if these two "worlds" were identical, as if words about something were the same as experience of that something, we increase the possibility of miscommunication. This is so because the same word will not call up, as it were, the same thought in different people unless they have had essentially similar experiences with the referent for that word. Thus, a teacher educator may talk (incessantly, it may seem to his or her students) about pupil control or word attack strategies or conceptual levels of curriculum, etc., without providing his or her would-be learners with opportunities to deal directly with the referents for these concepts. In such a situation (discouragingly common, apparently--see Adams and Webb, 1978) the teacher educator's concepts as he or she talks almost certainly will be different from the concepts engendered in the preservice teachers by those same words. So different in fact, that the learning process may be disrupted. On the other hand, when both the professor and the students have had similar contact with similar referents, the likelihood of this differential understanding of verbal symbols is reduced.

This logical support for field-oriented education, resulting from inquiry into the relations of language and living has never, to my knowledge, been considered seriously by any substantial number of teacher educators. The congruence of its principles, however, with those deriving from the other investigations reported herein makes it a fit subject for such consideration.

The accompanying diagram (after Ogden and Richards, 1938, p. 11) represents the relations obtaining among the real world, concepts about that world, and symbols (words) naming those concepts.

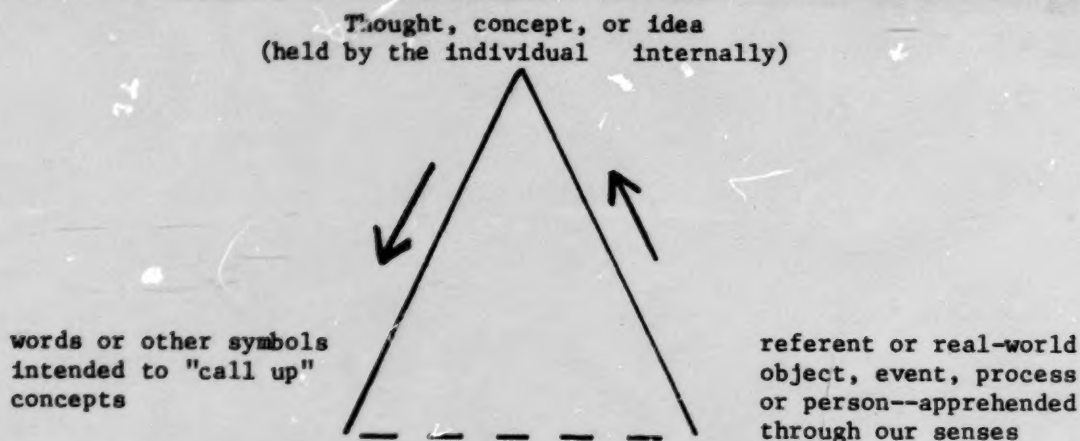


Diagram 1

The point of the illustration is that there is a direct relation between the experience of something (the right hand base of the triangle) and our mental representation of it (the apex), as when I see a hippopotamus or touch an ice cube and consequently generate an image or thought. Also a direct relation exists between the thought or mental image (apex) and the symbols used to refer to those thoughts (left hand base). However, only an indirect relation holds between the Symbol and the Referent (left hand and right hand bases, respectively). The symbol stands for the real thing; the two are not connected directly. Language symbols normally are arbitrary; we attach meaning to them through our experiences and the cultural processes of agreement and repetition. (This view, that language is not identical to concept formation is explored in a very different way, but with a similar conclusion, by Dorothy Lee [1967].) The logical implication of Semantic theory for teacher education is that teachers-in-training are to be helped to conceptualize their craft through referent contact; they are not to simply memorize verbal symbols about teaching.

Cognitive/Developmental Psychology

"Cognitive" and "Developmental" are interpreted quite broadly in this

section. They are linked in order to focus on the development of concepts (cognitions) as treated by various theorists and researchers. Given the enormous amount of relevant material available, I have been very selective in what I have included under this heading.

Bolton, in a 1977 book which stresses the fundamental nature of concepts in complex human learning, notes that they are formed by persons through interacting with the environment. They are not gained through language.

We develop concepts through testing them against reality and we develop a knowledge of the world through the elaboration of concepts and conceptual systems. (p. 5)

At another point (p. 21) he asserts, "Concepts are the expression of the ways in which experience has become organized." Bolton notes that the individual is never simply a passive receiver of stimuli from the environment. Rather, he is an intending seeker, an organizer and a constructor who, through his encounters with things, agents, and people builds his understanding of the world. For the purposes of this paper, the point is that, for Bolton, an individual's purely linguistic identification of some part of reality would not qualify as a meaningful concept since it lacks the very element--personal, contingent experience--that gives it human value.

Thus, living experience is the anvil on which one hammers out one's development and learning, i.e., develops concepts. If the metaphor holds, we can say that just as an attempt to forge metal without the resistance of the anvil--to hammer it in the air, so to speak--is a useless effort, so with the education of teachers: instructing teachers-to-be without providing early and intensive field experience results in relatively formless or imprecise concepts of teaching. This idea is echoed by Smith (1968, p. 61):

The . . . preparation of the teacher should, all in all, reconstruct the teachers' attitudes [concepts] so that they come to see . . . children . . . as having extended potential. To help bring this about, the teacher educator must have a rich supply of realistic descriptions and reproductions of actual situations as instructional material.

In another view of concept formation, but with recommendations similar to Bolton's and Smith's, Woodruff suggests that the behavioral change process is the key to deriving educative principles. He has elaborated a systematic model of teaching and learning with direct and explicit meaning for teacher educators (Woodruff 1964, 1967, 1973; Kapfer and Woodruff 1972). The process by which human behavior changes is described by Woodruff as follows (1973, p. 238):

Behavior operates on a cybernetic loop which connects the person and his environment in a continuous input, storage and processing, output, feedback cycle. This cycle is only complete. . . when a person is directly engaged with his environment and subject to the consequences of his behavior. . . . Learned behavior in any situation is behavior that is practiced in the circumstances of that situation. (emphasis added)

Experimental evidence supporting this man-environment interaction view of learning is provided in Smith and Smith (1966) and in Woodruff (1964, 1967).

Woodruff (1967, p. 60) asserts the primacy of perceptual or referential activities as against the unreferenced use of symbols (words) for the successful initiation of concept formation.

It would be trivial to emphasize the role of perception. . . if perception were not seriously disregarded at almost all levels of teaching. Verbal input can lead to concept maturation only when the essential bits of perceptual meaning are present. When they are not present, referential input is necessary regardless of school level.

In the present paper I use the term contextual experience to denote perceptual or referential activity of the learner bearing directly on the intended learning

outcome. The experience may be provided or directed by the teacher, or may have been acquired previously by the student. The critical point is that the acquisition of appropriate perceptual data by the learner must occur preparatory to his generating personally meaningful ideas. Piaget's references to schemes (schemata) (Wadsworth 1978; Piaget 1963) and Petrie's (1974) notion of perceptual categories are other ways of expressing essentially the same phenomenon.

Not that learner activity is, per se, learning. Tyler (1976, p. 9) warns educators against confusing the two:

It is the activity the student is carrying on that he is learning. If he simply listens or reads and tries to remember what he is reading or hearing, he may be learning how to memorize, but he is not learning how to use the information. [See references to Olson and Bruner in last sub-section for further evidence confirming this view.]

Woodruff maintains that "referential input"--that is, perceptions, sensory intake, experience--cannot be substituted for by "communication input"--that is, verbal symbols (Woodruff 1967, 1973). Were we to educate a teacher-to-be without recourse to immersion in real teaching-learning situations prior to student teaching, yet with the expectation that the student teacher would perform as if he or she had mature concepts about the various facets of teaching, we would, according to Woodruff, violate the human learning cycle (at least for complex social learning) and could expect but relatively ill-formed and unproductive ideas in our student teachers.

The human developmental psychology of Piaget emphasizes his insistence on the centrality of the learner's experiences in provoking learning (Piaget, 1972a):

. . . .[N]ew thoughts. . . are constructed within the individual himself, constructed internally through the process of reflexive abstraction and constructed externally through the process of experience. (p. 25-26).

Piaget and Inhelder (1973, pp. 358 and 391) describe the "supposed genetic order of the formation of memories" (the basis of concepts) as 1) actions by the person → 2) construction of cognitive structures → 3) memory-images. Again, for our purposes, the interesting idea is what precedes "memory-images." That such "constructed" thinking is not limited to children's cognitive development is asserted by Renner, et al. (1976):

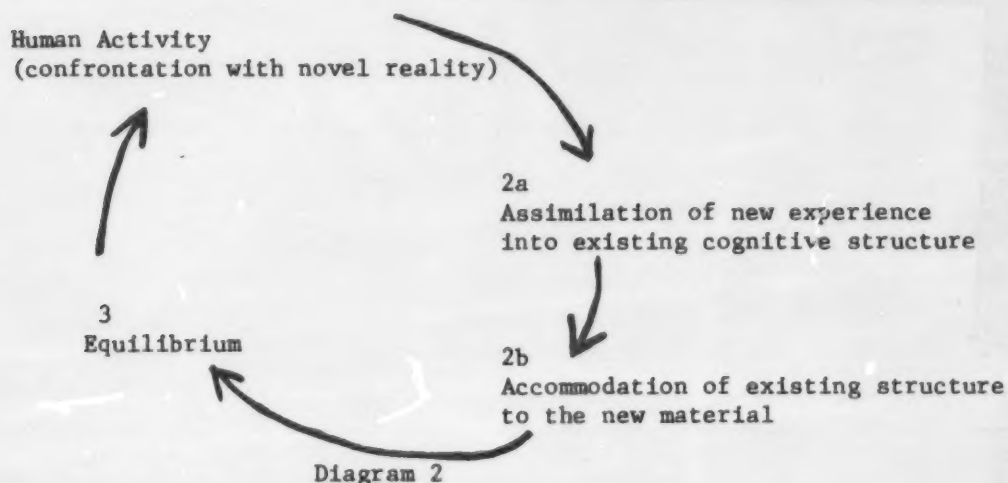
. . . .[A]ny adult encountering a new and unusual notion will have to attempt to secure physical or interactive experience because basic cognitive structures must be built when one is learning something new. (p. 15)

The very heart of Piaget's conception of intelligence is the notion that the individual must be personally involved in the complementary processes of assimilation and accommodation. New data from the environment are taken in--assimilated--by the learner, and existing comprehensions (the so-called schemes, or organized prior learnings) are modified--accommodated--in light of the new material (Piaget, 1963, pp. 6-7). Thus, the practice of involving preservice teachers in real-world settings early on is supported by Piaget's generalization.

Piaget (1972b) explicitly contrasts the efficacy of verbal and experiential teaching when he cites the experiment of a Geneva colleague who taught children the words associated with a certain level of mental functioning, but did not provide them with the supportive experiences associated with that level. The result: "[T]here was almost no difference in their operational thinking. Words did not change their thought processes." (p. 27) Do we have any reason to think that adults (preservice teachers) lacking the experiences necessary to the formation of adequate concepts are likely to learn from words only? Again the message is: relevant experiences first, associated verbal symbols second.

Anglin (1977, p. 16), also a developmental psychologist, cites research that, according to him, details the patterns of concept formation in children: 1) human activity → 2) discovery of relationships for categorizing → 3) abstraction of qualities defining the concept → 4) attaching a name to the newly formed concept. For the purposes of the present discussion, the key ideas are that 1) human activity initiates the sequence, and 2) the formation of the concept ante-dates the learning of the name of it.

The accompanying diagram represents a simplified model of Piaget's notion of equilibration, a core element in his theory of human cognitive development. The important point for the present discussion is that the first step is some kind of learner activity, i.e., involvement with the elements of the intended learning. This learner activity is what I am calling contextual experience. The support for field experiences is thus explicit in Piaget (Bolton 1977, pp. 18-19; Piaget 1963, 1972a, 1972b; Wadsworth 1978).



To this point we have been concerned with experience only from the perspective of its cruciality to conceptual learning. We have not attended to the question of how it may be provided. That is, no mention has been made of the different ways in which a human learner can be helped to have contextual experience, some of which ways enhance learning more than others. Nor have we pointed out that perceptual experience alone, without direction, without integration into a learning whole, without thinking and reflecting--can never guarantee formation of productive, learner-satisfying concepts. A review of the illustrations of learning process provided in this chapter will highlight the post-perceptual cognitive activities to which I am referring. Due to limitations of space of this monograph, a more extensive analysis of the matter will not be attempted.

The accompanying diagram illustrates the fundamental steps of the behavioral change process examined in this sub-section, Cognitive Development psychology.

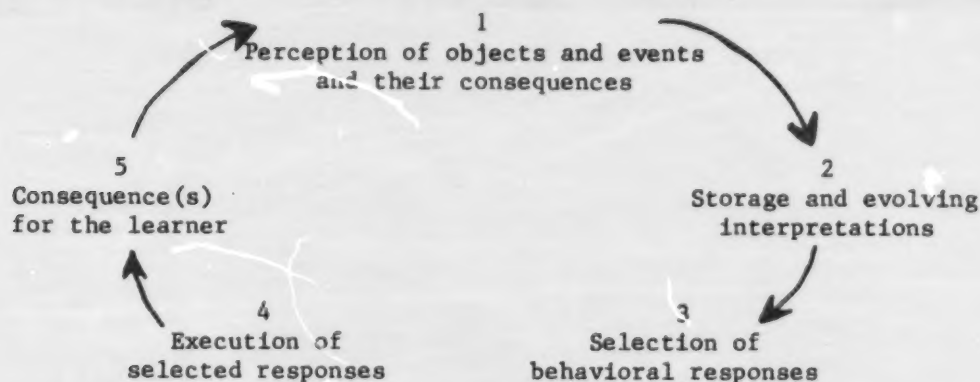


Diagram 3
(after Woodruff 1967, 1973; Kapfer and Woodruff 1972)

Applied Social Psychology

Another line of psychological inquiry that has yielded findings supportive of field experiences for preservice teachers is that of applied social psy-

chology. The findings on individual and group change generated in the field are relevant to teacher education because the kind of learning teachers need is the typical learning examined by applied social psychologists. Such learning is complex, socially focused, and has both cognitive and emotional elements (see Kolb and Fry 1976; Benne and Chin 1969).

Tracing the socio-psychological development of thought about human learning and change, Benne and Chin (1969) identify one approach (the "normative-re-educative" approach) as providing the most explicit data regarding change in teaching-like situations. This approach historically goes back to Dewey (e.g., 1938) comes through such individuals and activities as Kurt Lewin, National Training Laboratories, action research, and sensitivity groups, and lately has resulted in the diverse collection of concepts known as Organization Development (OD). The inquiry has featured close attention to questions about how people learn and change in social situations. As a result of asking these questions evidence has been generated supporting a view of human learning/change which insists on learner involvement as an initial step in the teaching-learning situation (Argyris 1976; Kolb and Fry 1976; Schmuck et al, 1977; Schon 1975).

The following representative statements are to the point:

The learner must have past experience from which he learns, present experience in which he learns, and prospective experience in which he will apply his learning. (Schon 1975, p.6)

. . . .[L]earning, change, and growth are best facilitated by an integrated process that begins with 1) here-and-now experiences followed by 2) collection of data and observations about that experience. The data are then 3) analyzed and the conclusions of this analysis are feedback [sic] to the actors in the experience for their use in the modification of their behavior and choice of new experiences (Kolb and Fry, 1976, pp. 34-55)

Argyris (1976) recommends that for learning aimed at the solution of real-life problems, the teacher use a methodology which attends to the complexity of the "noncontrived" world and which involves learners "easily and deeply to maintain motivation (pp. 26-27). In the same vein, The Second Handbook of Organization Development in Schools (Schmuck, et al. 1977), especially the first chapter, "Theory and Technology," clearly shows that OD theory contributes to a view of learning which is interactive and learner-generative. Finally, Golden (1972, p. 8), a group trainer, after observing that "Experience based learning is the most effective way to change attitudes and behavior," says that for such learning to take place,

. . .the learner must be active, he must relate himself to his environment, and he must be involved with others, and feed it back into the system.

Clearly, if to become a teacher requires that one learn both cognitive and attitudinal elements, and if it requires dealing with other people, then the experimental and the theoretical tendencies of applied social psychology conduce to the proposition that preservice teachers ought to be involved, early and frequently, in the realities of school classrooms.

The following diagram summarizes the learning process as given by Kolb and Fry (1976, p. 33):

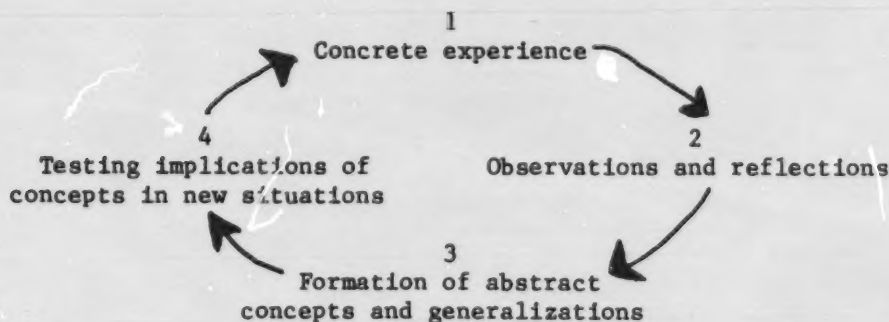


Diagram 4

Research on Learning

Does the widespread practice of early field experiences find justification in the experimental and conceptual literature on learning? Examining recent cognitive learning research and comparing it to more traditional S-R experimentation, Wittrock (1978) notes that the recent studies lead to a new role for the learner: "The learner is . . . given a new, more important active role and responsibility in learning from instruction and teaching" (p. 101). Beatty (1977) in a paper entitled, "Activation and Attention in the Human Brain," claims there has been a major shift in the role of the learner as elaborated by psycho-neurological learning research in recent years. The change is from a static, input-output model of learning to a model featuring interactive, mediating, generative processes. This general finding is echoed by Wittrock (1977) in the same volume in which Beatty's paper appears, when he writes of researchers being led to "hypothesize internal cognitive processing devices" (p. 169). The idea is that the individual does not confront the instructional setting as a Lockean tabula rasa, but rather as an operator on the environment.

McKeachie appears to have signaled this change in a presidential address before the American Psychological Association in 1974, entitled, "The Decline and Fall of the Laws of Learning." His point is that classical "laws" of learning have not been productive in aiding complex human learning. He concludes the address by noting ". . . most educational situations are interactive in which a developing, learning human being engages with a situation in ways designed to meet his learning needs." (p. 11).

A 1974 paper by Olson and Bruner, "Learning Through Experience and Learning Through Media," confirms this view of the learner. As the authors point out,

when we have a learning experience, we learn two different things: the content of the experience and some skill or ability through the mode of the activity of our experiencing. That is, from using a typewriter, we learn both about typewriters and about typing. "This distinction is reflected in ordinary language in the terms knowledge and skill or ability." (Olson and Bruner, 1974, p. 129). The principle means that when one engages in teaching or teaching-like experiences, one learns things beyond what one learns when one simply hears words about teaching. ". . .[D]ifferent forms of experience converge as to the knowledge they specify, but they diverge as to the skills they develop." (Olson and Bruner, 1974, p. 132). Thus, the use of language in instruction depends for its efficacy upon the prior contextual experiences of the students.

. . .[A]ll modes of instructing are in some sense incomplete or inadequate for achieving full performatory power or efficiency, and knowledge in the last analysis is tied to one's own experience. (p. 149)

If he does not operate on the contextual reality of the intended learning, the learner cannot give personal meaning to it, nor improve his performance powerfully. Clearly, the concept is an echo of earlier ideas brought out in this chapter.

Similarly, contrasting two learning patterns, which he calls respectively "information assimilation" and "experiential learning," Coleman (1976) notes that the first, a verbal orientation, is used increasingly as a child proceeds through school. He raises a question about this practice, observing that

. . .there is a cost to the compression of experience through language, a cost that lies in incompletely understood language, defects in chains of associations that words may bring, defects in processing of information stored in the form of words and their associations. (p. 55)

This assertion implies the elimination of the cognitive defects noted through use of the "experiential learning" pattern.

"Good" teaching, it should be noted, is not, either in Coleman's nor in other investigators' writings, identified exclusively with an experiential approach. Rather the point is to know when to foster direct experience and when to rely more appropriately on a verbal, information assimilation model. What is the right mix of the two? is a helpful question. Nevertheless, as noted earlier, this chapter concentrates on the importance of the provision of direct experience more than on the full cycle of concept formation.

Following a series of experiments, Rothkopf (1968, 1970, 1976) has elaborated a concept of learner control in the teaching-learning setting which he designates "mathemagenic" behavior. The term refers to activities which "give birth to learning" (1970, p. 325). They are activities the learner engages in that determine the effectiveness of the stimuli of the instructional situation. A homely description of these learner activities would include: attending to the teaching situation and the instructional materials present, choosing objects in the setting on which to focus more fully, processing of observed data, recalling data from memory, etc. Even more simply described, they are actions which have been called "attention, study, and effort" (Rothkopf, 1968, p. 115). Their centrality to learning has recently been reaffirmed in the massive Beginning Teacher Evaluation Study (e.g., Denham and Lieberman 1980).

The critical element in this, for our purposes, is the implication that one must be involved in some direct way with the instructional situation in order to produce effective learning. The learner is the controlling factor: if he attends to the features of the setting intended to teach something,

and if he processes the information available, then learning likely will eventuate. Such a case argues for an "immersion" approach to learning how to teach--immersion, that is, in the world of teaching. Contextual experience can provide this needed engagement.

The application of cybernetic thinking to the instructional process has resulted in an emphasis (similar to Rothkopf's) on the feedback control processes used by a learning individual (Smith and Smith 1966):

. . . cybernetic theory proposes that learning. . . is determined primarily by the nature of the feedback-control processes available to the behaving individual Thus, if we are to structure the course of learning, we must design the learning situation to fit the control capabilities of the learner (p. viii).

Again, the centrality of the learner and his decisions and activities is reaffirmed. Cybernetically-oriented research on human learning rejects the concept of homeostasis in favor of activity as the description of normal human behavior (Smith and Smith 1966, p. 497).

As noted earlier, some cognitive psychologists also conceive of behavior as a cybernetically functioning system (Woodruff 1967, 1973). The significance of such self-regulated functioning, for our purposes, is the crucial importance which thereby attaches to learner interaction with the environment. Simply telling someone about teaching with the hope of changing his or her behavior as a result, is almost certainly going to be unproductive.

To conclude this section, here is an interesting bit of theory support for field experiences from an educational philosopher, Petrie (1974):

Drawing an analogy between a good chef and a good teacher, Petrie notes that the good chef is never a pedestrian recipe-follower but rather one who has tried the recipe, tested the results, modified the recipe on a succeeding effort, and so on. In the same way, the productive teacher is the one whose

"perceptual categories" are congruent with verbal descriptions of teaching. One's perceptual categories result from contextual experience. Generally, the more contextual experience (with appropriate reflection and generalizing) one has, the more adequate are one's perceptual categories. "A good deal of practice seems to be required to enable the student to perceive the [teaching] field [adequately]." (p. 55). "[U]ntil the student develops perceptual categories which go beyond mere recipes, he will not become a real teacher" (p. 59).

The accompanying diagram (after Coleman, 1976), loosely representing the theory and research presented in this section, is similar in its view of the learning process to others presented herein.

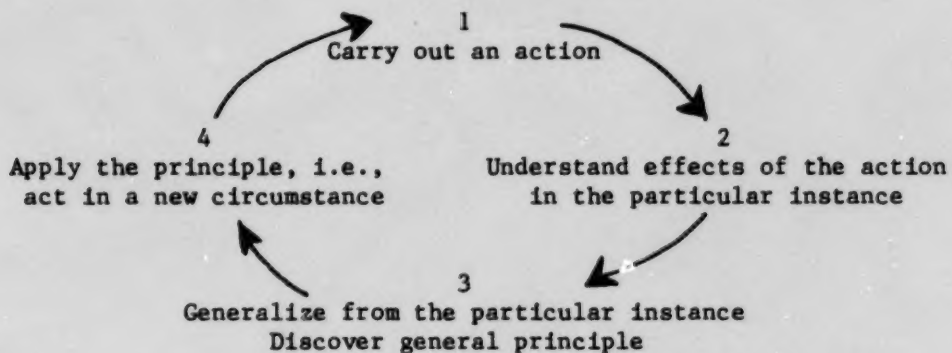


Diagram 5

Summary

Four points stand out from the experimental findings and the theoretical discussions reported in this section of the monograph:

1. The pattern descriptive of the learning process emerging from recent psychological (and other) investigations into the phenomena of human learning is one which centers on the significance of the learner and his or her concerns.

2. For instances of complex conceptual learning (the kind of learning teacher educators seek for teachers-to-be), this pattern contrasts verbal or symbolic input to the learner, with experience in the learning context by the learner. The contrast reveals that verbal teaching alone or verbal teaching prior to learner contextual experience will be less productive than teaching in accordance with the cyclical pattern illustrated below:

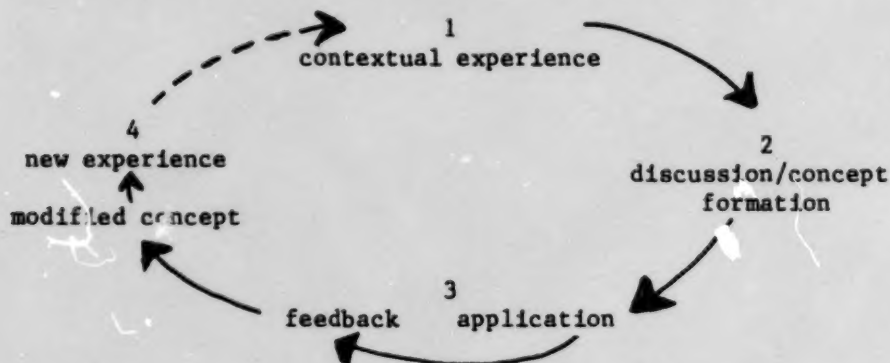


Diagram 6

3. In the absence of appropriate sensory input the human organism fails to acquire some stabilizing order, some structure (conceivably neurological) that allows it to generalize and to make all data---sensory and verbal--relevant to its intentions in the learning situation. This need for contact with the referent in the process of concept formation is not restricted to young children. I accept the statement of Ruchlis and Sharefkin (1975, p. 133): ". . .[T]he base of most learning is sensory experience." Undoubtedly the increasing independence from the necessity of referential input we experience with increasing age is due to our building up a reservoir, as it were, of concepts founded upon direct, personal experience. This stored conceptual knowledge allows us to comprehend and manipulate meaningfully the verbal symbols associated with the concepts learned.

4. Experience alone, unconnected to further effortful processing by the learner, is not necessarily an educative force. Concept formation is initiated by perception, not completed by it. After the perceptual categories are developed through experience, the mental operations of generalizing, relating abstracting--concept formation, in other words--occur. The result is an internal representation of some reality, which is then tested through instrumental behavior with resulting feedback, and so on.

These four points inevitably must be seen to have substantial implications for teacher education. In the final portion of this section, below, some of those implications are elucidated.

Implications for the Practice of Teacher Education

The consumers of education have a right to expect teachers to be educated through the most relevant and productive means available. Teacher educators generally have not fulfilled that expectation in preparing teachers-to-be. Time and time again we hear our own students (or read about others' students) lamenting the discrepancy between the real world of teaching and the verbal world of their preservice training. (Adams and Webb, 1978). The criticism usually is not a blanket condemnation of teacher education, but rather a plea--often poignant, sometimes hostile--for us to "get our act together" so that new teachers will not have to spend their first year in shock.

No more sure guide to a substantial part of teacher education exists, in my judgment, than the findings presented above. I take it that the major goal for students in education is that they develop a concept of teaching--tentative and relatively simple, perhaps, initially, but a personally meaningful concept, nevertheless. The building of such a concept (which includes

attitude, knowledge and skills) of teaching is facilitated by early and frequent contact with classrooms, pupils, administrators, professional teachers and parents--the real environment of education.

At this point I mention again that in the present section I have not attended to, except in the most superficial way, the crucially important question of how one's experiences are to be integrated into one's conceptual understanding. Graphic illustrations of the presumed "learning cycle" have been presented but it must be recognized that only the step of relating sensory input to cognition has been attended to. While it is true that what happens to the learner as he or she moves through (or fails to move through) the learning sequence beyond the initial contextual experience is determinative of the nature of the concepts he or she will form, only the beginning of the cycle has been attended to in the present section. The fact that the succeeding steps have not been elaborated herein should not be allowed to reduce the impact of what has been shown.

Some may quail before the implication of the essentialness of heavy referential learning for preservice teachers, fearing perhaps that such an approach would lead to a simple apprenticeship model of teacher education. Of course it is possible, if people choose, that such a model may emerge; however, it is not implicit in the approach to learning presented. The experience to be gained at the beginning of (and continuing through) the teacher education sequence is a necessary preliminary to concept formation and, hence, skilled teaching; it is not an end in itself. In Petrie's (1974) words, we are to help preservice teachers master the requisite "perceptual categories" so that the necessary individual conceptual work can be accomplished productively. The approach I am recommending is not imitative, but generative.

To conclude, we should be about the business of helping preservice (and inservice, for that matter) teachers to construct personally meaningful concepts of teaching through the provision of referent experiences early and frequently in their pre-professional or professional learning.

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Chapter 3

A Survey of Institutional Practice

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Fairly substantial information is available on student teaching and intern practices in education, two forms of field experience, but considerably less data can be found with respect to early or exploratory field experiences (EFE's), within the definition adopted for this monograph (see introduction). The chapter presents information gleaned from a large-scale survey of U.S. teacher-preparing institutions.

Population and Sample

The population of teacher training institutions was defined as the combined lists of member institutions for the American Association of Colleges for Teacher Education (AACTE) and the Forum for Field Director of Professional Laboratory Experiences (a sub-group of ATE). Eleven hundred thirty-seven institutions were identified from these two lists.

The sample was drawn using two procedures. First, in states where fewer than 10 institutions were identified all institutions were included in the sample. Second, in states with 10 or more institutions identified, a 40 percent random sample was drawn. The total sample size was 550 or 43 percent of the defined population. The sample was designed to increase the chances of representation from all states without that representation necessarily being equal or proportional.

Procedures

Specific individuals (including the chief administrator of educational programs and a person thought most likely to know about EFE programs) were identified by name at each institution included in the sample. A letter was sent to the administrator explaining the purpose of the study and stating that a questionnaire was being sent to the institution under the name of the person identified. Administrators were asked to encourage completion and return of the questionnaire as soon as possible.

The questionnaire, along with a cover letter describing the study and explaining EFE terminology, was sent to the individual who at least by title appeared to be in a position to be well informed about EFE's at that institution. The cover letter also asked that the questionnaire be thoughtfully completed and returned within a specified time limit.

A follow-up letter was sent or phone call made to those institutions not responding within six-eight weeks from the date of original mailing. A total of 240 institutions (43%) responded to the questionnaire.

Questionnaire

The questionnaire used to collect the information was composed of two parts. The first part was to be completed by all institutions regardless of whether or not EFE's were part of their teacher education programs. This portion of the questionnaire was very short and asked for demographic information concerning the size and location of the institutions. Institutions not including EFE's in their programs were asked to complete the first part of the questionnaire and return it in the addressed envelope included. The second part of the questionnaire was much longer and asked for specific information concerning the EFE's as part of the total teacher education programs. This portion was to be completed by those institutions currently

operating EFE-type programs or planning to implement such within a 12 month period.

Part two of the questionnaire included 37 questions. Not all of the 240 institutions responded to each question, causing the number of responses included in the analysis to vary from question to question. The results are presented separately for parts one and two of the questionnaire and according to each question.

Results

Table I indicates the distribution of responding institutions according to the size of the city in which they are located. Approximately one-third (32.1%) of the institutions were located in cities with a population of less than 15,000. Twenty-seven percent were located in cities between 15 and 50 thousand population. The remaining 41.4 percent were located in cities with populations in excess of 50,000. Nearly half (41.4%) of the responding institutions were state-owned with 40.0 percent privately owned and 20.0 percent denominationally owned (private and denominational are not mutually exclusive).

Table I

CITY POPULATION

Category	Frequency	Percentage of Cases
0-999	6	2.6
1,000-4,999	21	9.1
5,000-14,999	47	20.4
15,000-49,999	61	27.0
50,000-149,999	39	17.0
150,000-499,999	19	8.3
500,000 +	37	16.1
	230	

Two hundred and nineteen (91.3%) of the responding institutions reported having at least one form of accreditation. One hundred forty-three (61.4%) reported NCATE accreditation, 179 (76.8%) reported regional accreditation, and 93 (39.9%) reported state accreditation.

The sizes of education programs in terms of student enrollment at each institution are presented in Table II.

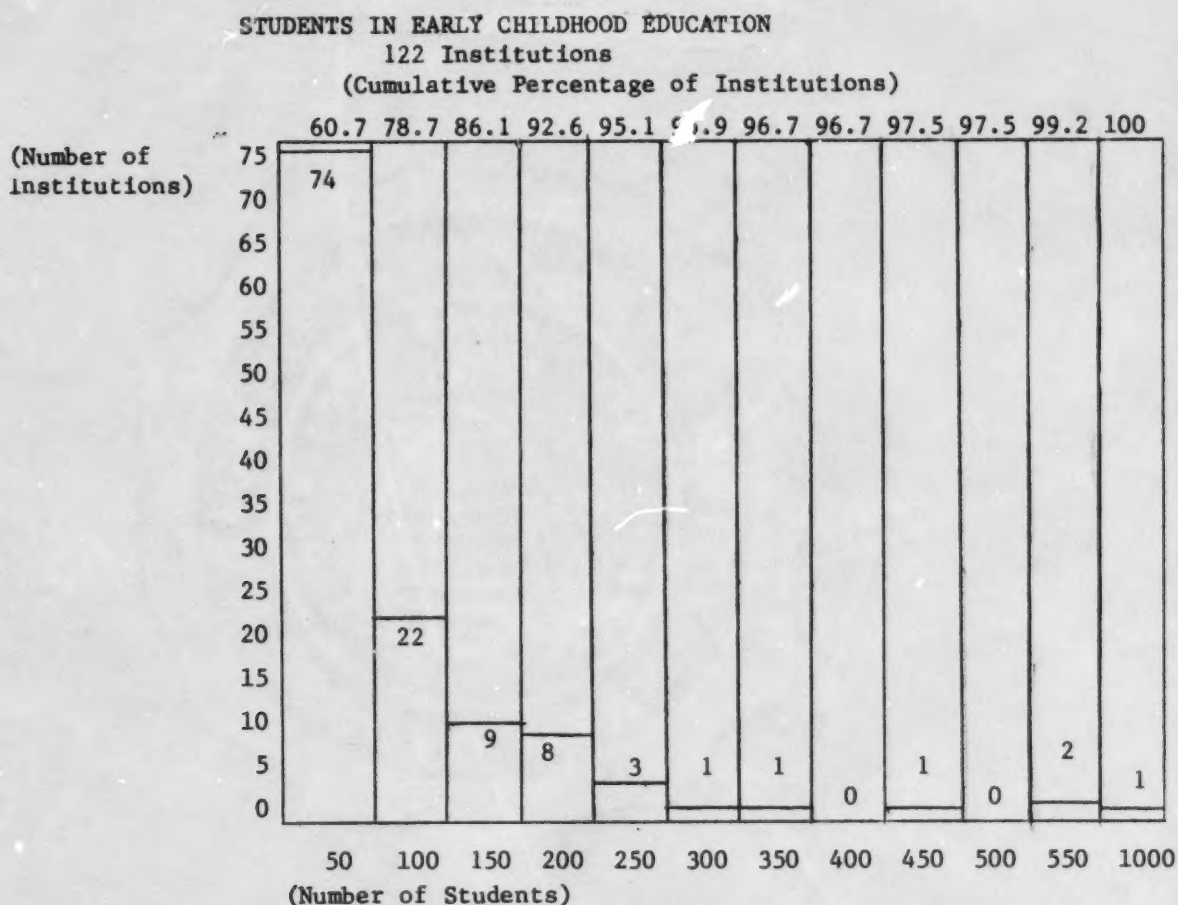
Table II
STUDENT ENROLLMENT FOR EDUCATION CERTIFICATION PROGRAM

Program	$\bar{X}$	SD	Number of Institutions
Early Childhood Ed.	80.6	102.9	122
Elementary Education	184.6	203.7	199
Middle School	39.0	52.2	32
Secondary Education	238.2	321.8	204
Special Education	141.1	175.5	125
Art K-12	47.6	75.0	14
Music K-12	40.1	46.2	16
P.E. K-12	220.9	291.2	13
Reading	54.6	47.6	11
Total Programs	585.1	720.7	211

These data are further broken down and summarized in Tables III through XII. Here the enrollment figures are presented according to the number and percentages of institutions with enrollments of various sizes according

to type of educational program. Table III, for example, is a summary of the enrollments of 122 institutions with Early Childhood Education Programs. The vertical axis depicts the number of institutions reporting a specific enrollment figure. The number of students enrolled is presented along the bottom line of the table and the cumulative percentage of institutions is presented at the top of each enrollment interval. Seventy-four (60.7%) of the 122 institutions with Early Childhood Programs reported enrollments of 50 or less students. Data presented in this manner give the reader an understanding of the enrollment distributions. Slightly over 92 percent of the Early Childhood Programs had 200 or less students enrolled.

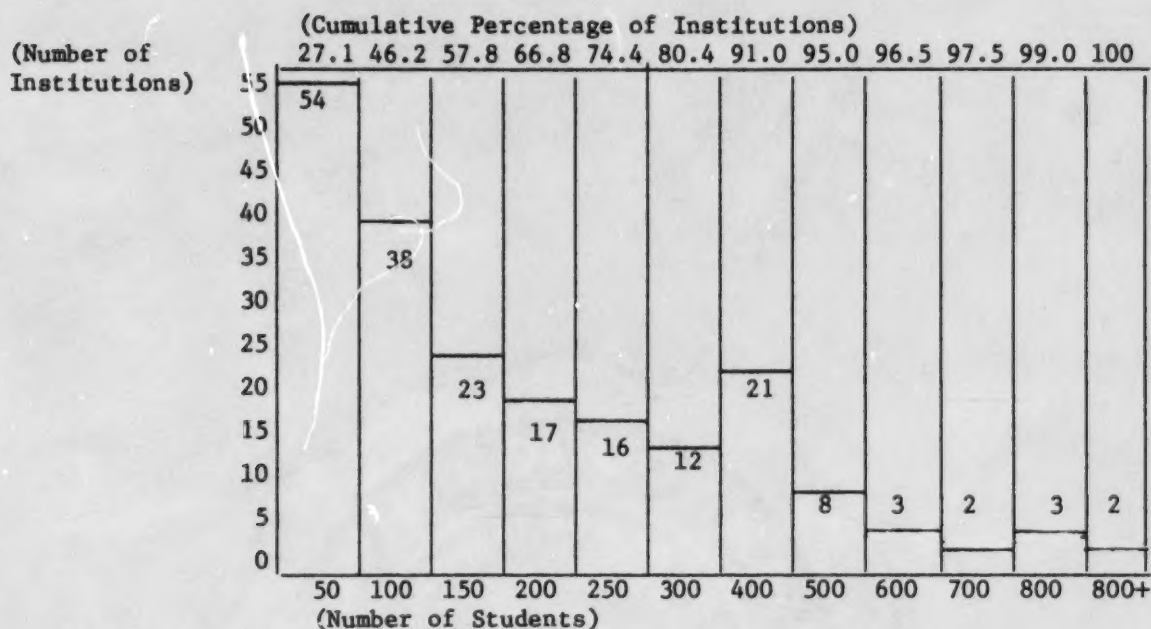
Table III



One hundred ninety-nine institutions reported Elementary Education Programs (Table IV). One hundred fifteen (57.8%) reported enrollments between 0 and 150 students. Ninety-five percent of these institutions had enrollment of up to 500 students.

Table IV

STUDENTS IN ELEMENTARY EDUCATION
199 Institutions



Twenty-six of 32 (81.3%) Middle School Programs reported between 0 and 50 students enrolled (Table VI).

Student enrollment figures for Secondary Education Programs are found in Table VI.

Table VII presents similar data on Special Education. Table VIII is a summary of total education programs.

Table V

STUDENTS IN MIDDLE SCHOOL
32 Institutions

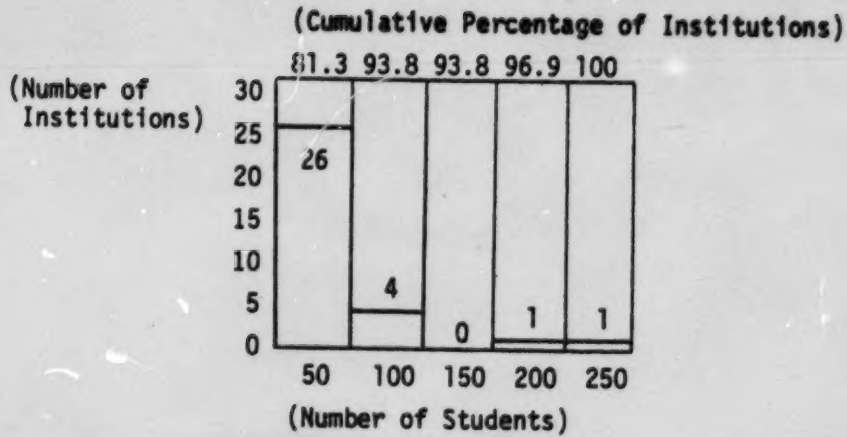


Table VI

STUDENTS IN SECONDARY EDUCATION
203 Institutions

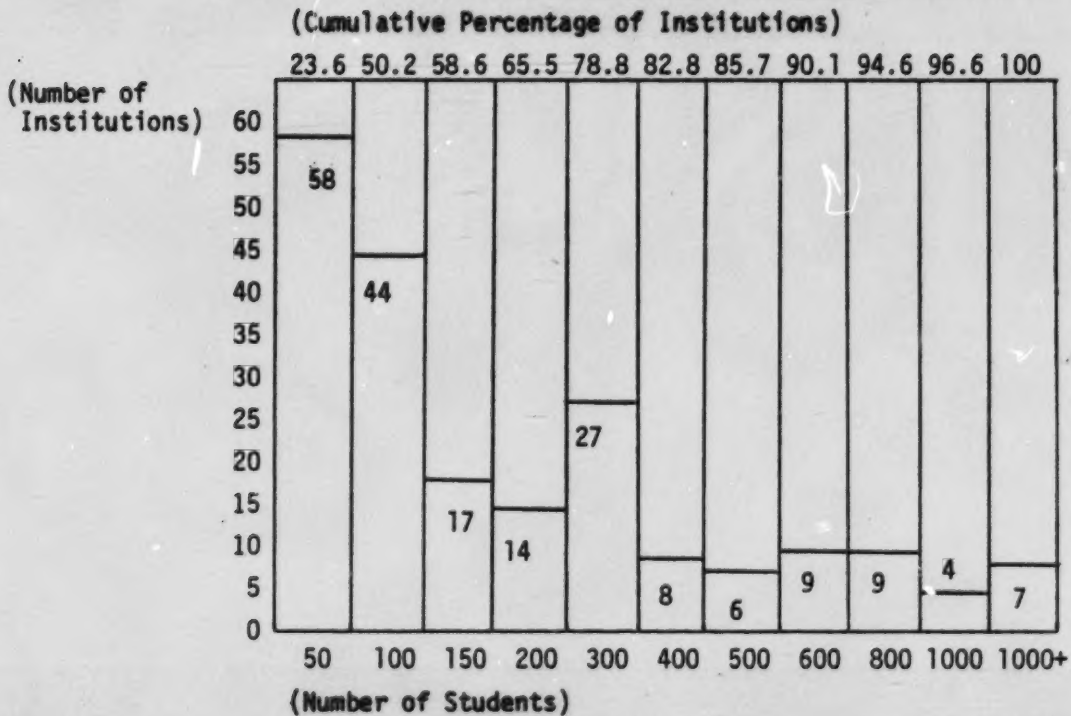


Table VII

STUDENTS IN SPECIAL EDUCATION
125 Institutions

(Cumulative Percentage of Institutions)

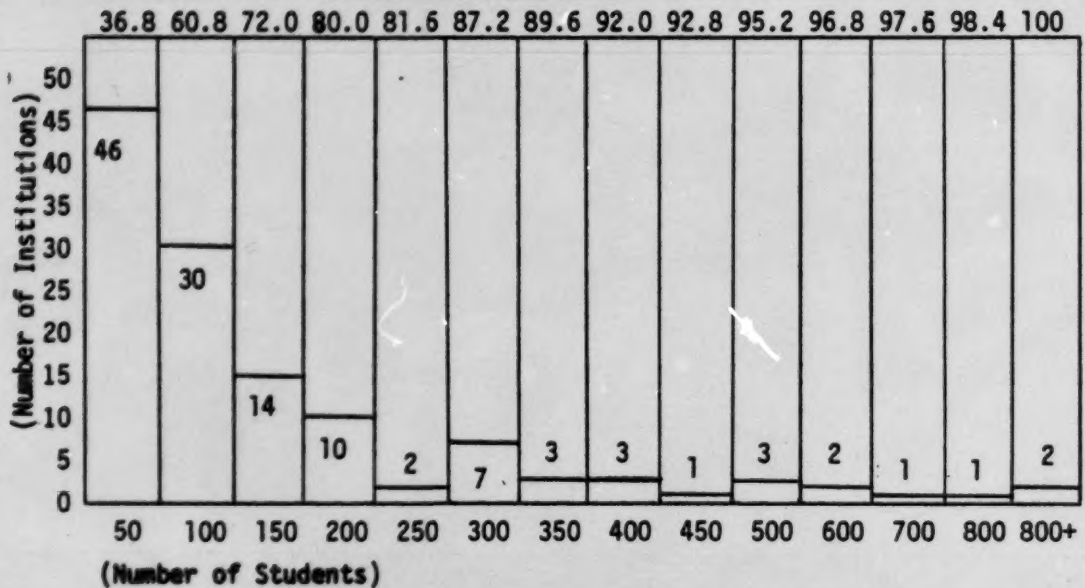
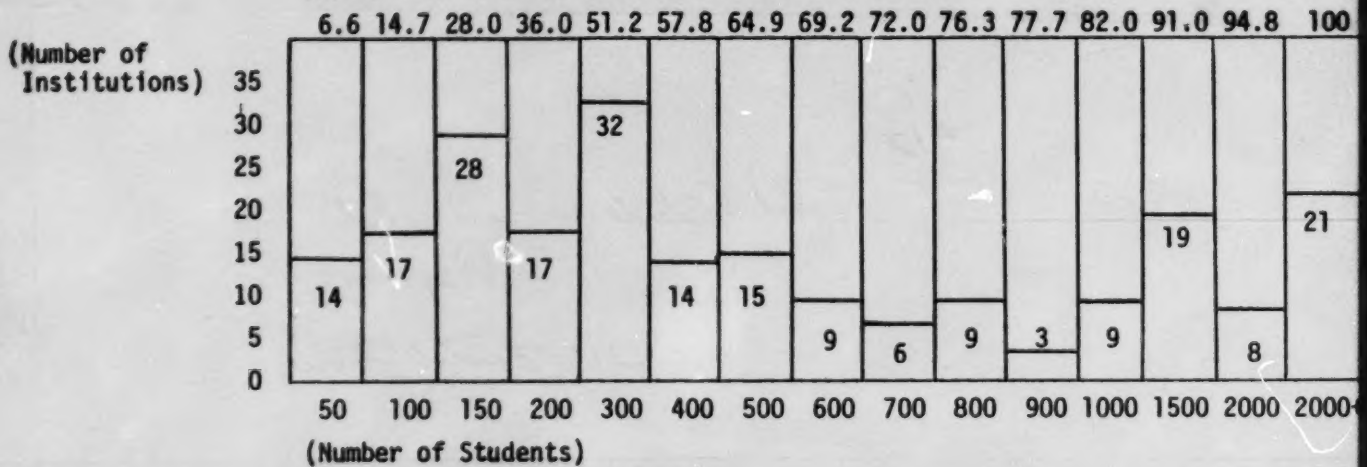


Table VIII

TOTAL STUDENTS IN EDUCATION PROGRAMS
211 Institutions

(Cumulative Percentage of Institutions)



Using 1978 figures, it was predicted that 80.8 percent of the students currently enrolled in education programs would eventually meet the requirements and receive their respective certification. Ninety-two percent of the 213 institutions responding to this item indicated that at least 50 percent of their students would eventually certify. Fifty-six percent of the institutions predicted that eighty percent or better of their students would be certified.

A second measure of the size of educational programs is the number of full time faculty equivalents (FTE) assigned to each program. Table IX summarizes these data. Twenty-five percent of the institutions had fewer

Table IX
FULL TIME FACULTY EQUIVALENTS (FTE)

Program	$\bar{X}$	SD	Median	Range	N
Early Childhood Ed.	2.5	2.7	2.0	0.3 - 18.0	130
Elementary Education	6.1	6.5	3.5	0.5 - 52.0	201
Middle School	3.1	3.5	2.0	1.0 - 18.0	29
Secondary Education	7.5	12.0	4.0	0.5 - 99.0	209
Special Education	5.3	5.8	3.0	0.3 - 40.0	130
Art K-12	2.9	2.2	2.3	0.5 - 6.0	6
Music K-12	3.1	2.3	2.0	1.0 - 7.0	8
P.E. K-12	13.9	17.3	4.1	1.5 - 52.0	16
Reading	2.8	1.5	2.1	1.0 - 6.0	13
Total Programs	21.2	23.7	11.0	1.3 - 99.5	225

than six FTE in all their education programs combined. Fifty percent had fewer than 11 FTE's and 75 percent had fewer than 30 FTE's.

The remaining portion of this report is a summary of responses to those questions dealing with EFE programs only. The summaries are reported for each question separately.

Question: "Does your department or college have a program or programs which include EFE's?"

Two hundred and thirty of 233 (98.7%) responding institutions said they did. An additional institution reported planning to implement EFE's within the next twelve months. It is questionable that 98+ percent of all institutions in the sample (550) operate education programs which include EFE's. It was felt that those institutions participating in EFE operation and development were probably more willing to respond to the questionnaire than were those institutions not involved or unfamiliar with EFE's and, therefore, the response rate is raised in that direction.

Question: "How long have EFE's been a part of your program(s)?"

Of 229 institutions responding to this question, 182 (79.5%) indicated "more than five years," 25 (10.9%) said four to five years. Only 17 (9.6%) said their programs were new within the last three years. It is difficult to know how effectively institutions were discriminating between student teaching experiences and EFE's as defined. Although EFE were defined to exclude student teaching, it is not clear how closely this guideline was followed in responses to some questions.

Question: "Are EFE's a required part of your education programs? Is credit given for EFE's"

About 85-90 percent of the responding institutions require students to participate in EFE's in their several education programs (see Table X). In these same programs it was reported that about 60 percent of the institutions granted credit for these experiences (see Table XI). The responses did not specify how or under what conditions credit was or was not granted or offered.

Table X
EARLY FIELD EXPERIENCE REQUIREMENTS

Program	Programs Requiring	Number of Institutions Responding	Percent
Early Childhood Ed.	125	137	91.2
Elementary Education	184	198	92.9
Middle School	44	52	84.6
Secondary Education	184	206	89.3
Special Education	112	122	91.8
Art K-12	10	11	90.9
Music K-12	8	9	88.9
P.E. K-12	10	10	100.0
Reading	2	2	100.0

Table XI
EARLY FIELD EXPERIENCE CREDIT

Program	Number Giving Credit	Number of Institutions Responding	Percent
Early Childhood Ed.	89	137	65.0
Elementary Education	133	199	66.8
Middle School	28	52	53.8
Secondary Education	139	206	67.5
Special Education	79	122	64.8
Art K-12	7	11	63.6
Music K-12	8	9	88.9
P.E. K-12	8	10	80.0
Reading	1	2	50.0

Question: ". . . indicate the total number of (clock) hours a student in each program would typically spend in EFE's."

The average clock hours (Table XII) per program ranged from 62.5 (three Reading programs) to 150.4 (10 P.E. programs). With four exceptions, Early Childhood Education, Middle School, Secondary Education and Reading, all programs averaged between 100 and 160 hours. In all cases the standard deviations were very large indicating wide variations in the number of hours required among similar programs.

Table XII
TOTAL CLOCK HOURS IN EARLY FIELD EXPERIENCES

Program	Number of Hours		Number of Institutions Responding
	$\bar{X}$	SD	
Early Childhood	98.0	122.0	136
Elementary Education	121.0	117.1	199
Middle School	95.4	130.5	52
Secondary Education	71.3	84.1	206
Special Education	101.2	118.7	122
Art K-12	104.3	141.3	11
Music K-12	150.9	192.1	9
P.E. K-12	140.0	298.6	10
Reading	62.5	53.0	2

An examination of the clock hour requirements for the Early Childhood (Table XIII), Elementary Education (Table XIV), Middle School (Table XV), Secondary Education (Table XVI), and Special Education (Table XVII) programs indicates that between 70 and 80 percent of all institutions responding required 150 or less hours in EFE's. The averages reported in Table XII are inflated by the few institutions reporting extremely high hourly requirements.

Table XIII

CLOCK HOURS IN EARLY FIELD EXPERIENCES
EARLY CHILDHOOD EDUCATION PROGRAMS
136 Institutions

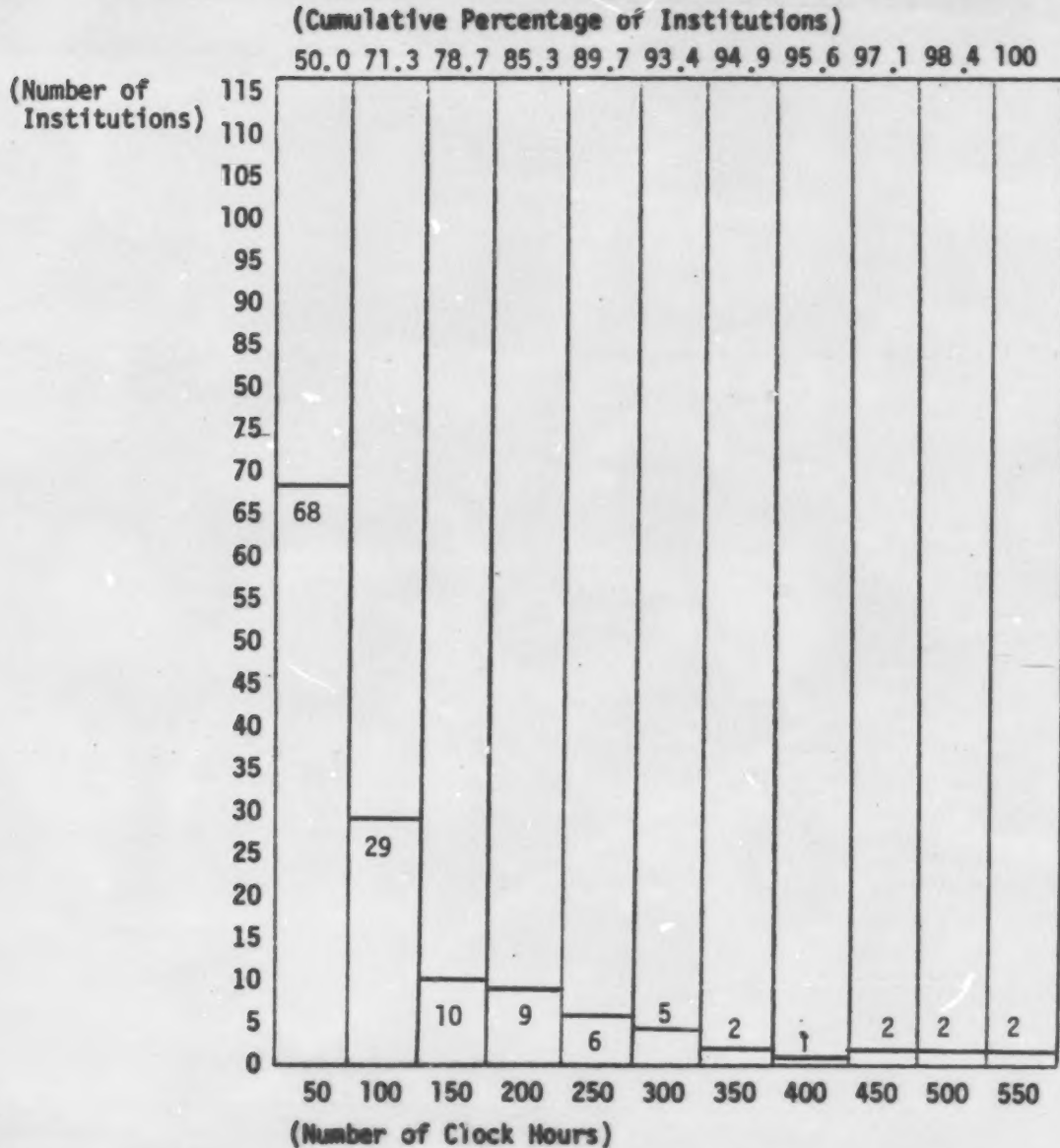


Table XIV

CLOCK HOURS IN EARLY FIELD EXPERIENCES
ELEMENTARY EDUCATION PROGRAMS
199 Institutions

(Cumulative Percentage of Institutions)

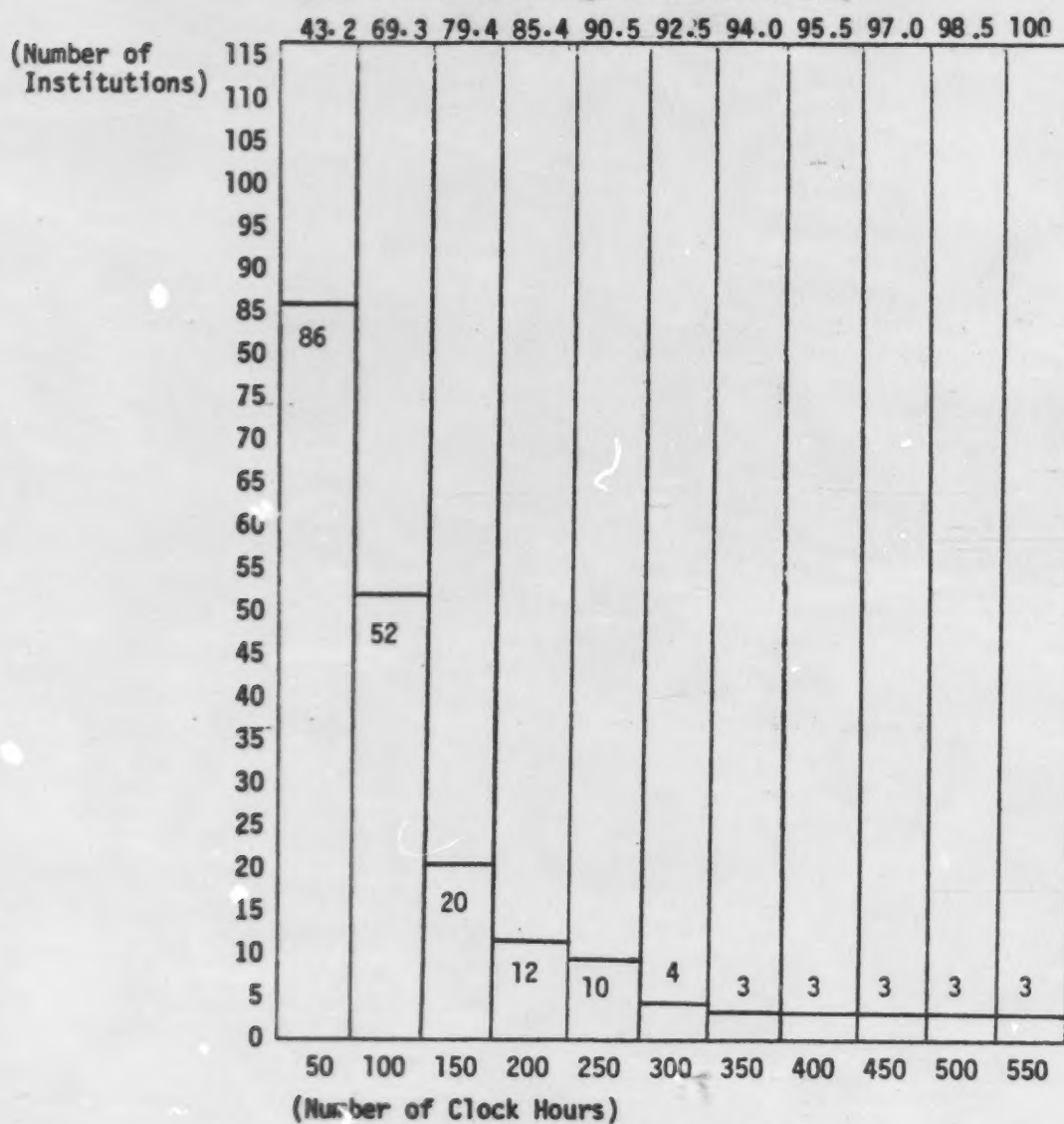


Table XV

CLOCK HOURS IN EARLY FIELD EXPERIENCES
MIDDLE SCHOOL PROGRAMS
52 Institutions

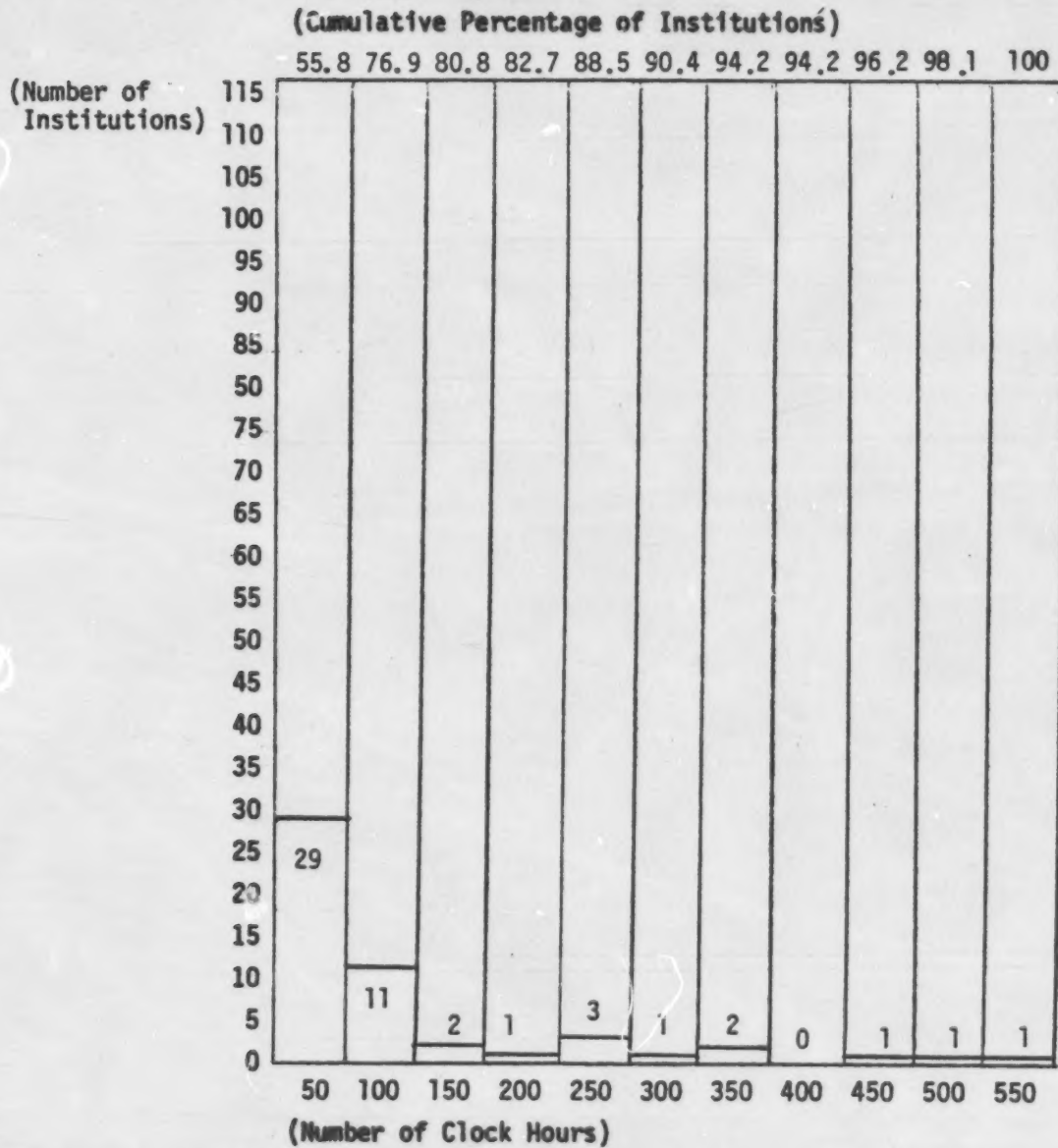


Table XVI

CLOCK HOURS IN EARLY FIELD EXPERIENCES
SECONDARY EDUCATION PROGRAMS
206 Institutions

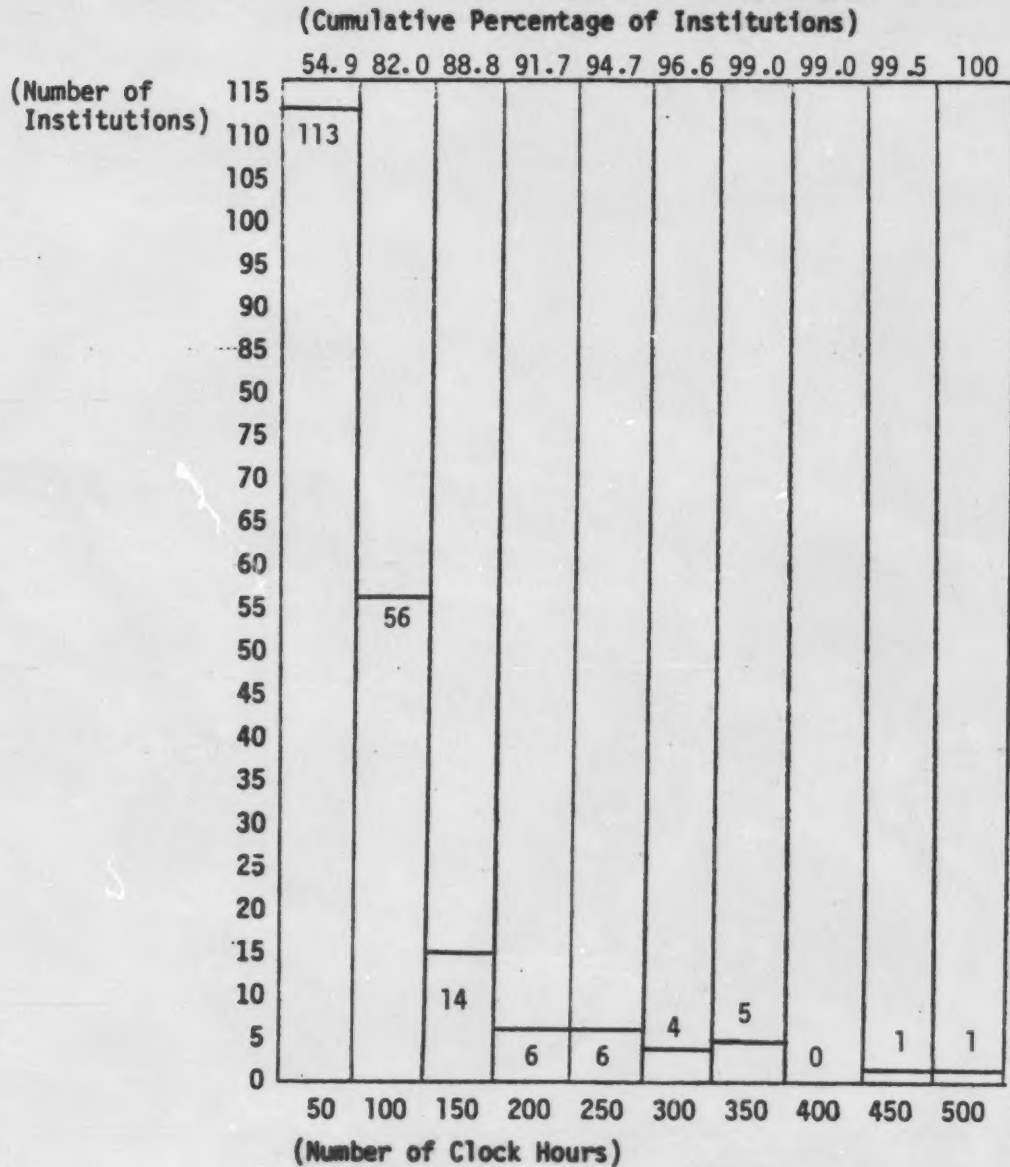
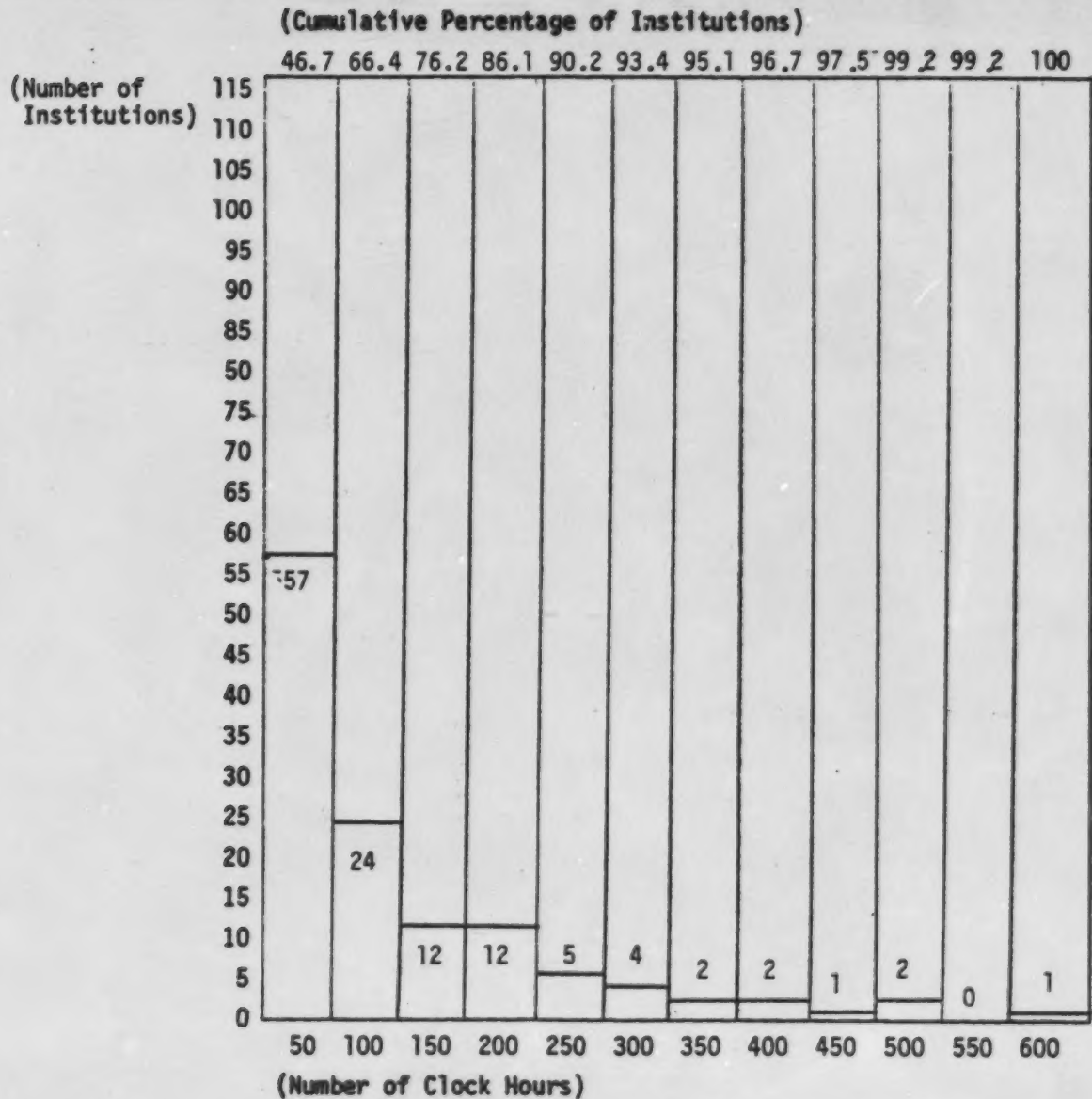


Table XVII

CLOCK HOURS IN EARLY FIELD EXPERIENCES
SPECIAL EDUCATION PROGRAMS
122 Institutions



Question: "What is the total number of students who participate in EFE's during a single year?"

The mean number of students participating in EFE's during a single year (Table XVIII) range between 10.7 (Art Education K-12) and 139.0 (Secondary Education).

Question: "How many college personnel supervise EFE's during a single year?"

The average number of university personnel supervising EFE's (Table XVIII) ranges between 1.5 (Art Education K-12) and 6.3 (Reading).

The data summarized in Table XVIII appear to represent a ratio between students and supervisors. This is not necessarily the case. Students may participate in EFE's as subgroups, and not all simultaneously. These data may be interpreted as a yearly ratio. A given number of supervisors have responsibility for a number of students over a year's time. This ratio, the yearly ratio, ranges from 7.1:1 in Art Education K-12 to 34.9:1 in Secondary Education.

Question: "How would you describe the relationship between EFE's and the total curriculum of teacher education programs at your institution?"

Open comments were grouped to create distinct categories describing EFE and curriculum relationships (summarized in Table XIX). Some institutions reported more than one type of relationship. The 151 responses which described EFE's as an "integral part of the program" were not specific enough to provide insights into the relationship itself. It appears that EFE's are tied to the sequence of education courses and used to practice what is taught in those courses.

Question: "Describe the types of EFE's included in your program(s)."

Of 229 institutions responding to this question, 227 (99%) involved their students in observing classroom instruction. Other major activities

Table XVIII

STUDENT PARTICIPANTS AND COLLEGE
SUPERVISORS OF EARLY FIELD EXPERIENCES (single year)

Program	N	Number of Students		Number of Supervisors		Yearly Ratio Student/Faculty
		X	SD	$\bar{X}$	SD	
Early Childhood Ed.	110	53.0	83.4	2.2	2.8	23.9:1
Elementary Education	175	120.5	172.4	3.7	4.7	32.8:1
Middle School	27	52.0	58.3	2.7	2.7	19.5:1
Secondary Education	176	139.0	379.4	4.0	8.5	34.9:1
Special Education	95	89.0	145.8	3.1	3.7	29.0:1
Art K-12	7	10.7	10.3	1.5	1.2	7.1:4
Music K-12	10	19.9	28.6	1.7	1.0	11.6:1
P.E. K-12	8	46.4	32.3	2.9	1.9	16.1:1
Reading	3	50.7	46.9	6.3	9.2	8.0:1

Table XIX

EXPLORATORY FIELD EXPERIENCE - CURRICULUM RELATIONSHIPS

Category	Number of Institutions
EFE's part of or in conjunction with education courses	37
EFE's included as part of first education course	32
EFE's require students to apply educational theories in the classroom	31
EFE's are basis of classroom instruction	9
EFE's are designed to help students make career decisions	13
EFE's are used to screen candidates for programs	7
EFE's increase the involvement of students as they progress in the program	19
EFE's are an integral part of the program	151

include: tutoring individual students (97.8%), writing reports of their experiences (94.8%), completing non-instructional tasks (91.3%), and planning instruction (84.3%). These activities are itemized in Table XX.

In reviewing these data some surprises were noted. Education institutions concerned with the development and upgrading of the profession spent little time involving their students in the governance of the profession. Only six (2.5%) of the institutions had their students participate in or attend professional meetings as part of their training. Also, parent and teacher conferencing experiences accounted for only .9% of responses indicating little attention being paid to this aspect of teaching--one which assumes more importance with mainstreaming legislations and required

Table XX

FREQUENCY OF EARLY FIELD EXPERIENCE ACTIVITIES
229 Institutions

Activity	Frequency	Percent of Institutions
Observing classroom instruction	227	99.1
Tutoring	224	97.8
Periodic reporting of experiences	217	94.8
Completing non-instructional tasks	209	91.3
Operating media	196	85.6
Assessing student activity and characteristics	194	84.7
Planning instruction	193	84.3
Designing instructional materials	188	82.1
Supervising extra curricular activities	154	67.2
Assessing teacher characteristics	146	63.8
Reviewing education literature	140	61.1
Supervising labs, field trips, etc.	140	61.1
Planning non-instructional activities	136	59.4
Planning personal change	116	50.7
Advising and consulting students	95	41.5
Observing clinical therapy sessions	86	37.6
Teaching small groups	17	7.1
Teaching mini topics	11	4.6
Team teaching	10	4.4
Attending professional meetings	6	2.5
Teaching the total group	5	2.1
Determining grades	2	0.9
Participating in parent conferences	2	0.9

elementary conferences in many school systems.

Question: "Please answer the following questions in relation to planning and coordination of EFE's at your institution."

a) "Who is or was involved in the planning process?"

More respondents (181, 78.7%) said that the education faculty planned EFE's. It was not clear from their answers whether the planning was done by a committee or whether the entire faculty was involved, although 23 respondents specifically listed committees of faculty members. Public school teachers and administrators were the second most commonly listed group of EFE planners (73 respondents identified them). Third on the list is college students (40) with EFE/Student Teacher Directors and Education Department administrators running a close fourth (with 38 each). Four respondents included education graduates and community members in their EFE planning.

b) "What steps are included in your planning process?"

Some universities take applications from students and then set up sites to fit the needs of those students. Several stated that they reviewed data from previous EFE's, set up objectives, planned activities to accomplish those objectives, located sites and assigned students to them, oriented students before EFE began, made visits to observe students during EFE, and then evaluated the success/failure at the end.

Question: "How are EFE's sequenced within your program(s)?"

Ten elements of sequencing were identified from the responses. These elements (Table XXI) were combined in some programs. Clearly the most common elements of sequencing were the linking of EFE's to the education courses and the increased responsibility involved in the EFE's as the

students become more advanced in their training.

Table XXI

EARLY FIELD EXPERIENCE SEQUENCING

Sequence Element	Number of Institutions
Increased responsibility with advanced class status	69
In conjunction with education courses	63
Scheduled early in course sequence	25
Varies between programs	21
Advanced standing students only (Junior - Senior)	9
Included in every course	5
Short term experiences (hours or days)	4
Just prior to student teaching	3
Optional throughout program	3
Long term experiences (weeks)	2

Question: "At what level(s) are your students typically involved in EFE's?"

Two hundred and twenty nine institutions responded to this question. Of them, 91 (39.7%) involved students in EFE's at the freshman level, 188 (82.1%) at the sophomore level, 208 (90.8%) at the junior level, 159 (69.4%) at the senior level, and 39 (17.1%) at the graduate level. The distribution is heaviest during the junior year. This is somewhat surprising given that a main purpose for including EFE's in a program is to help students explore education early in their college career.

Question: "Are general goals stated for EFE's at your institution?"

Only 153 (70.5%) of the 217 institutions responding to this question indicated they had goals specified for EFE's in their program.

Question: "Are specific objectives stated for EFE's?"

Specification of objectives was reported by 139 (75.0%) of the 212 institutions. Twenty-five percent of all responding institutions reported not having objectives for EFE's.

Question: "Are EFE's used in any way to evaluate students?"

One hundred and ninety-eight (89.6%) of 221 institutions said EFE's were used to evaluate students.

Question: "What aspects of the student and/or his performance are evaluated?"

Attitudes and interpersonal skills were the most frequently evaluated aspects of student characteristics and/or behaviors. Other areas including personal appearance, emotional and psychological factors, etc., are summarized in Table XXII. With very few exceptions, assessment of these traits or skills was accomplished using in-house or non-standardized instrumentation.

Question: "Who evaluates the university student?"

Evaluators were of two types, non-university or college personnel (EFE site personnel) and university or college personnel. Responses are summarized in Table XXIII.

Course instructors and supervisors or advisors were the most frequently reported university evaluators. Cooperating teachers were the most frequently non-university evaluators.

Table XXII

AREAS OF STUDENT EVALUATIONS
204 Institutions

Area Evaluated	Number	Percent
Attitudes	189	92.6
Interpersonal skills	187	91.7
Personal appearance	167	81.9
Emotional and psychological	160	78.4
Instructing skills	158	77.5
Knowledge of content	151	74.0
Intellectual skills	140	69.0
Leadership skills	137	67.2
Interests	132	64.7
Personal characteristics	21	10.2
Planning and evaluation skills	7	3.4
Oral skills	7	3.4
Written communication skills	5	2.5

Question: "How are the results of student evaluations during EFE's used in your program?"

Two hundred and four institutions responded to this question (Table XXIV). The most common uses for evaluation information for student benefit (i.e., counseling, advising and program planning). Less important uses were for program benefit, i.e., selection, grading, certification, etc.

Question: "Describe how students are evaluated (the process)."

Responses to this open ended question were grouped to create seven distinct evaluation processes. Table XXV summarizes these categories.

Table XXIII
EARLY FIELD EXPERIENCE EVALUATORS
204 Institutions

	Number of Institutions	Percent
University		
Course Instructors	77	37.7
Supervisors/Advisors	56	27.5
Director of Field Experiences	24	11.8
Education Faculty	24	11.8
Education Department Chairman	7	3.4
Student (self evaluation)	6	2.9
Non-University		
Cooperating Teachers	175	85.8
Cooperating Principals	19	9.3

Table XXIV
EARLY FIELD EXPERIENCE STUDENT EVALUATION USES
204 Institutions

Use	Number of Institutions	Percent
Student career counseling and advising	183	89.7
Student program planning	137	67.2
Student selection	115	56.4
Recommendation for certification	90	43.9
Course grading	12	5.9
Screen for student teaching	6	2.9

Table XXV

STUDENT EVALUATION PROCEDURES

Procedure	Number of Institutions
Cooperating teacher completes a form	18
College supervisor observation	15
Cooperating teachers write a non-structured evaluation	14
Student written evaluations on activities performed	6
Director of EFE holds conference at end of experiences	5
Students and cooperating teachers evaluate together	3
College course instructors evaluate performance on specifically assigned tasks	2

Question: "How many EFE sites does your institution use?"

EFE sites were classified as school or non-school. Two hundred and three institutions responded. One hundred seventy-eight (87.7%) of those institutions reported using fewer than 50 school sites. Fifteen (7.4%) institutions reported using between 50 and 100 sites. A total of 95.1 percent of the responding institutions utilize fewer than 100 school sites. Ninety-five percent of the responding institutions used 25 or fewer non-school sites. Table XXVI presents a summary of the types of non-school sites used and the number of institutions using each. The variety of types of institutions is meaningful and suggests that education in the classroom is not the only alternative being pursued through EFE's.

Question: "Indicate the amount of time spent by EFE students from the various programs in each of the listed school sites."

Five main certifications were considered: Early Childhood Education, Elementary Education, Middle School, Secondary Education and Special Education. Table XXVII presents a summary of the average amount of time spent in a variety of school sites by students in the five certification areas. Amount of time is a percent of total EFE time rather than specific hours or days.

Table XXVI

NON-SCHOOL EARLY FIELD EXPERIENCE SITES
203 Institutions

Non-School EFE Sites	Number of Institutions	Percent
Day care centers/nurseries/orphanages	45	22.2
Hospitals	36	17.7
Juvenile detention homes/center dealing with crime	22	10.8
Church groups/camps	20	9.9
Clubs (4-H, YMCA, YWCA, etc.)	17	8.4
Institutions for the physically handicapped	15	7.4
Institutions for the mentally ill	13	6.4
Special services education (reading, foreign languages)	13	6.4
City parks and recreation programs	10	4.9
Field trip institutions (museums, zoos, libraries, etc.)	10	4.9
Businesses/factories/post office/government	9	4.4
Institutions for the mentally retarded	7	3.4
Administrative offices/school board meetings	5	2.5
Indian schools	2	1.0
Nursing homes/associations for the aged	1	0.5

Table XXVII

AVERAGE PERCENTAGE OF TIME SPENT IN SCHOOL SITES

School Site	Certification Program														
	Elementary Education			Secondary Education			Middle School			Special Education			Early Childhood Education		
	N	%	SD	N	%	SD	N	%	SD	N	%	SD	N	%	SD
Pre School	50	21.5	17.5	6	7.8	9.0	-	-	-	13	16.3	16.6	88	57.6	27.0
Primary Grades	142	50.5	19.9	21	17.9	12.7	3	18.3	7.6	56	36.4	20.3	68	46.6	22.0
Intermediate Grades	113	41.3	15.1	20	14.7	12.1	7	26.4	10.7	55	35.7	13.8	19	18.7	12.2
Middle School	37	18.9	10.4	32	23.3	16.7	22	63.4	25.8	20	21.3	12.3	5	17.2	13.5
Junior High	20	16.5	14.7	119	38.1	16.5	19	46.6	22.5	27	19.9	11.1	7	10.8	9.6
Senior High	16	14.6	16.1	154	59.3	21.3	6	63.3	27.5	26	20.5	13.6	4	15.8	16.3
Alternative Schools	4	6.8	4.0	11	20.5	27.0	-	-	-	12	28.3	33.7	2	7.5	3.5
Vocational Schools	-	-	-	5	15.0	11.7	1	25.0	0	1	10.0	0	-	-	-
Higher Education	-	-	-	2	4.0	1.4	-	-	-	1	30.0	0	-	-	-

An analysis of the time spent by students from different programs in various school sites indicated that most of their time is spent in areas close to their chosen field. The two most frequently mentioned sites for students in elementary programs were primary and intermediate grades for a combined average of 90 percent of time spent at these two levels. An almost identical pattern was observed for students in secondary programs. They spent a combined average of about 95 percent of their time in junior and senior high school sites. Special education students spent less of their time in any one or two types of sites and tended to experience more levels of education. Depending on the purposes for EFE's, the age level specialization may or may not be an advantage. The broader the set of experiences included, the more information the education student acquires to help in selecting the level at which he or she desires to work. The notion of EFE's suggests that more diversity in terms of levels of education would be desirable.

Question: "What percentage of total EFE time is spent in urban, suburban, and rural settings?"

One hundred and sixty-three institutions reported including some portion of EFE time in urban settings. The average was 51.2 percent. By comparison, 134 institutions included EFE in suburban settings averaging 49.1 percent of their time. Rural settings were included in EFE's by 137 institutions for an average of 42.3 percent. No breakdown was available to determine urban, suburban or rural locations of the responding institutions themselves. In the West and perhaps other locations within the United States there is an increasing need for teachers with specialized training preparing them for teaching in rural settings.

Question: "List the criteria you use in selecting EFE sites for your students."

Table XXXII summarizes the criteria identified and the number of institutions who reported using each. By far the most frequently used criteria was the "accessibility or proximity to the university" followed by "willingness of site to participate." Competent site personnel was third.

Table XXVIII
CRITERIA FOR EFE SITE SELECTION
220 Institutions

Criteria	Number of Institutions	Percent
Accessibility of programs (proximity to campus/car pools)	131	59.5
School willingness to participate	85	38.6
Quality of teachers/personnel at site	64	29.1
Quality of site program	52	23.6
Cooperative personnel at site	42	19.1
Student preference or needs	37	16.8
Accreditation	26	11.8
Variety of programs	17	7.8
Public school recommendations	16	7.3
Variety of grade levels	12	5.5
Site trainers with minimum level of experience	12	5.5
Variety of settings (traditional, open, etc.)	11	5.0
Racial or cultural factors or mix	7	3.2
Variety of subject areas	4	1.8

Question: "Is EFE placement and coordination handled through an agency which services institutions other than yours?"

Of the 223 institutions responding to this question 177 (79.4%) reported they coordinate their own EFE placements. Forty-six (20.6%) indicated that some other agency was used. These "agencies" included school districts (31), placement services (7), Teacher Centers (4), and "others" (4).

Question: "Prior to the placement of your students with them, are site trainers involved in orientation experiences?" "Is the orientation required?" "Is credit given for the orientation?"

One hundred nine of 213 (50%) institutions indicated they did involve their site personnel in an orientation. Fifty-five (51.9%) institutions required the orientation and 17 (16.3%) provided some type of university or other type of credit for the orientation. Considering that only fifty percent of the institutions with EFE programs provide an orientation to their site personnel may be a cause for concern when coupled with the finding that most of the assessment of EFE students is conducted by the site personnel (usually cooperating teachers). Some type of orientation to the purposes espoused by the students' institution seems essential.

Question: "What does the orientation of site trainers include?"

Some inconsistency in responding is noted here. One hundred nine institutions reported orientation programs or sessions. In some cases more than 109 institutions reported using a particular orientation activity (Table XXIX). The most frequent elements of the orientations included 1) an overview of program requirements, 2) an introduction to EFE objectives, 3) an explanation of student assignments, 4) an explanation of student evaluation procedures, 5) an introduction to university supervising

personnel and, 6) role definition for site personnel. These six elements appear to be of an orientation rather than training nature.

Table XXIX

SITE TRAINER ORIENTATION
220 Institutions

Elements of Orientation	Institutions Including	Percent
Introduction to EFE Objectives	108	49.1
Overview of Program Requirements	111	50.5
Explanation of Student Assignments	105	47.7
Explanation of Student Evaluation Procedures	95	43.2
Introduction to University Supervising Personnel	92	41.8
Role Definition for Site Personnel	91	41.4
Introduction to Study Guides or Course Outlines	58	26.4
Training in Use of Student Evaluation Techniques	43	19.5
Training in Observation Techniques	28	12.7
Training in Conferencing with Students	22	10.0

Question: "In selecting site trainers, what factors or criteria do you consider?"

A list of possible selection criteria was provided to the respondents with the option of adding to that list as needed. Seven criteria were identified. The number of institutions indicating use of each criterion

are summarized in Table XXX.

Table XXX
CRITERIA FOR SITE TRAINER SELECTION
220 Institutions

Criteria	Number of Institutions	Percent
Recommendations from their supervisors	156	70.9
Availability	130	59.1
Recommendations from college personnel	105	47.7
Observation of role performance	98	44.5
Their measured competence	57	25.9
Union or professional restrictions	18	8.2
Desire/willingness to cooperate	10	4.5

The most frequently used criteria were "Recommendation from site personnel supervisors" and the "Availability of the site person."

Question: This is a composite of four questions relating to the ratio between site trainers and the number of students they would typically supervise in a 12 month period.

The average number of students assigned to an EFE site trainer at any one time was 2.0 with a standard deviation of 3.0 with 195 institutions responding. The range was from one student to 30 students. The average number of weeks a student would be assigned to a site trainer was 11.9 with a standard deviation of 6.6. The minimum was one week and 60 the maximum. The number of weeks per assignment is surprising and suggests

some confounding with student teaching information.

The number of students assigned to a single site trainer within a twelve month period ranged from 1 to 87. The computed average across 185 institutions was 4.9. Fewer than 10 institutions reported more than 20 students per trainer.

Question: "Are there peak periods when more students are assigned to EFE's than at other times during the year?"

One hundred nineteen institutions responded. Only 74 reported peak periods distributed as follows: Fall (38), Winter (8), Spring (25) and, Summer (3). Fall and Spring appear to be the most heavily involved periods for EFE's.

Question: "In what form is compensation given to site insitutions or trainers?"

Two predominant types of compensation were reported; money (55 institutions) and college tuition waivers (24 institutions). Other types of compensation and the frequency reported include: college credit (3), library privileges (2), appreciation dinners (6), thank you letters (6), and free consultation services (5). Some of these types of compensation may be useful in stimulating other mutually beneficial arrangements which reduce budget expenditures from both the site and the univeristy or college. Sixty-nine of 87 (79.3%) institutions giving compensation did so directly to the site trainer and 29 (33.7%) gave compensation to the institution. Some institutions who gave compensation gave it to both trainers and institutions.

Question: "Are your students compensated in any way for EFE's?"

Only three types of compensation to students were identified by the

154 institutions who responded. These compensations were: 1) college credit (148 institutions), 2) travel reimbursement (6 institutions), and 3) pay for services rendered (3 institutions).

Question: "Does your institution carry liability insurance on students, site personnel, or others (connected with EFE's)?"

Fifty-eight institutions carry liability insurance on their students, three institutions carry insurance on site personnel and 14 institutions reported carrying insurance on "others" associated with EFE's although they did not explain who those "others" might be.

Question: "Are you now, or have you recently conducted research on the effectiveness of EFE's?"

Of the 210 institutions responding to this question, 159 or 75.7 percent said they had not conducted research on EFE's. For those 53 institutions who reported such research activity less than 10 gave any indication that results of their efforts were available upon request.

Question: "What areas of EFE's are you currently evaluating on a planned, systematic basis?"

Table XXXI summarizes the areas of evaluation effort identified by 125 institutions who responded to this question. Clearly the three most frequently evaluated areas are: 1) the effects of EFE's on student abilities to teach and work with others, 2) the effects of EFE's on the career decisions of the college students, 3) the effects of EFE's on student attitudes and interests. Next most frequently investigated were: 4) EFE curriculum development and revision, and 5) the use of EFE's as criteria for student selection.

Table XXXI

AREAS OF EARLY FIELD EXPERIENCE PROGRAM EVALUATIONS
125 Institutions

Areas	Frequency	Percent
Effects of EFE's on student abilities to teach and work with others	85	68.0
Effects of EFE's on student career decisions	84	67.2
Effects of EFE's on student attitudes and interests	78	62.4
EFE curriculum	48	38.4
Student selection on admission criteria	44	35.2
EFE supervisor	30	24.0
Costs of EFE's to the institution	24	19.2
Effects of EFE's on the attitudes of site trainers	21	16.8
Costs of EFE's to students	6	4.8
Costs of EFE's to site institutions	5	4.0

Question: "Have the data collected through your evaluation efforts resulted in EFE program changes?"

The responses to this question from 138 institutions were grouped to form categories of change. Sixty-four (46.4%) said no changes could be described. The remaining 74 responses are summarized in Table XXXII.

Question: "Are your students used as sources of information in your program evaluation efforts?" If yes, explain how.

Table XXIII summarizes the way in which various institutions reported

Table XXXII
EARLY FIELD EXPERIENCE CHANGES
138 Institutions

Changes Made	Number of Institutions	Percent
Integration within curriculum/ EFE activities	16	11.6
Times, dates and duration of EFE's	15	10.9
Better coordination/orientation between site personnel and institution	12	8.7
More student preparation prior to EFE's	8	5.6
Site selection	6	2.7
Site trainer selection	5	2.3
Placement system	2	0.9
Other	19	8.6

Table XXXIII
STUDENT SOURCES OF EVALUATION DATA
200 Institutions

	Number of Institutions	Percent
Student written class evaluation	43	21.5
Informally gathered	26	13.0
Surveys to students	19	9.5
Student self-evaluations	18	9.0
Interviews	12	6.0
Activity Logs	10	5.0
Surveys to graduates	9	4.5
Discussions	8	4.0
Annual/biannual evaluations	7	3.5
Input from students on evaluation committees	6	3.0
External assessors gather information	2	1.0
Other	8	4.0

collecting evaluation data from their students. In all, 200 institutions said they used students as data sources but most did not explain how. Some institutions reported more than one procedure or method.

Question: The institutions were given a list of potential implementation problems. They were asked to select the one or two most difficult problems they have faced in developing and implementing this program.

Table XXXIV summarizes what 185 institutions felt were their most significant problems they had to overcome in implementing their EFE programs.

Transportation and scheduling were by far the most frequent problems. In seeking to solve the problems of: 1) scheduling, 2) transportation and, 3) cooperation of site institutions the following steps were reported.

Scheduling:

1. Students scheduled their own times (5 institutions)
2. Education department coordinated EFE with class schedules (22 institutions).

Transportation:

1. College purchased its own vehicle (9 institutions)
2. Car pools (19 institutions)
3. Students use own transportation (11 institutions)
4. Use sites on public transportation routes (4 institutions)
5. Use closer sites (7 institutions).

Cooperation:

1. Involved sites in planning and evaluation process (6 institutions)
2. Inservice training for site staff (1 institution).

Table XXXIV

IMPLEMENTATION PROBLEMS

	Frequency	%
Scheduling	119	64.3
Transportation of students	108	58.4
Cooperation of site institutions	50	27.0
Too many students	34	18.4
Lack of site trainer expertise	32	17.3
Lack of university personnel expertise	29	15.7
Finances	29	15.7

Summary and Implications

In conclusion, it can be said that EFE programs are well established and that institutions of all sizes and in all parts of the country are investing their resources in EFE programs. It can also be said that even though trends may appear (as found in this survey), great diversity characterizes the various programs. Two strengths which the survey highlighted are 1) efforts to integrate and correlate EFE's with other aspects of education programs, and 2) program personnel appear to be making serious efforts to evaluate EFE's and use the data in constructive ways to help students and improve programs.

Weaknesses are present too, and need to be recognized and dealt with. For example, the structure of EFE's seems loose with one-fourth of responding institutions having no stated objectives for the experiences. Also the training of site personnel is practically non-existent, particularly in collecting data and evaluating students. Although evaluation is an on-going activity, few institutions are sharing with the profession the results

or findings from their efforts.

More data needs to be collected about these experiences as to both their effectiveness in the total teacher training program and their impact on the school systems involved.

It should be noted that a similar study conducted in Canada (Twa and Dung, 1981) yielded similar results. This study was presented in a paper at the annual meeting of the American Educational Research Association in Los Angeles, California in April, 1981.

References

- Twa, R. J. and Dung, D. D. Exploratory Field Experiences in Canadian Teacher Education: Phase 1, April 1981.

Chapter 4

Conclusions, Recommendations, and Suggested Standards for Implementing Exploratory Field Experiences

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Inevitably, human behavior phenomena under scrutiny turn out to be more complex than originally supposed. So it is with the phenomenon of early or exploratory field experiences in teacher education. (See Zeichner 1980, p. 46). Thus, although the present report gathers a substantial amount of data between its covers, the information presented does not lead clearly to definitive answers, not to pat solutions to problems.

The intent of this concluding section is to suggest what--to the authors--is implied for teacher educators by the material in this volume. We also propose standards for use by educators who either have an EFE program in place or are planning to implement such a program.

In general, the Commission report confirms the almost universal presence of early field experiences in teacher education programs. Ishler and Kay (Chap. 3) found that substantially more than 95% of U.S. teacher-preparing institutions have had such programs for at least five years. Gehrke's paper (Chap. 1) establishes the fact that other professional fields (law, allied health, etc.) also feature early clinical experiences for their students, although the nature and timing of these learning activities varies greatly by profession.

What is not confirmed in the report is a uniform understanding of why exploratory experiences are deemed valuable by teacher educators (or students,

for that matter, although the latter group have had their opinions recorded--see Ryan, et al., 1978). The widespread use of field experiences without even stated purposes as found by Ishler and Kay (Chap. 3) gives one pause.

Especially is the situation cause for concern when one considers that multiple purposes may be served (see Gehrke, Chap. 1) through a program of EFE's, e.g., career decision-making, motivation of students, initiation of concept learning, etc. Is the case one of lack of understanding of what is possible as to goals of EFE programs, or is it lack of effort to relate to some identifiable purpose what is actually done in a program? Our recommendation is that institutions attend directly and explicitly to questions of purpose; that the means--EFE's--be arranged and adjusted according to the ends they are to serve--not vice versa.

The paucity of evaluation data available, according to Ishler and Kay's respondents, is also unsettling. To us, the claim that a substantial majority of institutions are evaluating EFE programs, but that only a very few have findings available for public scrutiny is to be taken with a grain of salt. The more likely reality is that either no evaluation is being done or what is done is so informal and impressionistic as to be suspect.

Webb's contention (Chap. 2) that field experiences are most helpfully viewed as the first step toward adequate concept formation for teachers-in-training (as contrasted to a view of them as the practice part of a theory-practice paradigm) is a challenging one. His point is that learning to be a teacher based on verbal, rather than contextual (that is, relevant) experience, is likely to be shallow and limited. Such a view makes early, real-world teaching experiences for prospective teachers something more than simply opportunities to put into practice what has been studied in

the college classroom. Our recommendation is that teacher educators use EFE's as critically important initial steps toward their students' accurate formation of concepts about teaching, rather than as merely practice opportunities for previously provided verbal instruction.

Drawing on the material comprising the first three chapters of the present monograph, the following "Suggested Standards for Exploratory Field Experiences" provide educators with a reasonable and concise summary of recommended practices and policies intended to enhance the utility of a widely practiced element of teacher education.

Suggested Standards for Exploratory Field Experiences

These standards are provided to serve a two-fold purpose. First, they may be used as guidelines for the establishment of a new preservice program which will include field experiences or for an existing program wishing to add an exploratory field component. Second, they may be used as criteria for program evaluation.

The development of these standards was charged to a subcommittee of the ATE Commission on Exploratory Field Experiences and they have been organized under three headings: Administration, Program and Evaluation. Under the Administration heading are subsumed those activities which relate to overall program planning including supervision, location, philosophy, financial support and legal status. Those standards placed under the Program heading include: program design, sequence, specific field site requirements, objectives, orientation and time commitment. Finally, the standards placed under the heading of Evaluation include those which pertain to student attendance at the field site, student grading for these experiences, training for personnel involved in the program and on-going self-evaluation.

Administration:

1. Planning for and supervision of on-site students should involve personnel from both the college/university and host site who have been specifically trained to function in this role. It should not be assumed that either host site personnel or college/university faculty can function at peak levels without such specific training.

2. Students should have the opportunity to involve themselves with a variety of youngsters in different field settings, e.g., traditional, self-contained, open-space, non-school sites, urban, rural, a variety of grade levels, public and private institutions, and the like. Providing experiences in different settings will enrich the student's background and better equip him/her to function regardless of his/her eventual job placement.

3. Final student on-site placement should reflect joint planning among such interested groups as the local school district, college/university personnel and representatives of local professional educational associations. It is imperative that a good working relationship be maintained with all involved through joint planning. In addition, joint cooperative placement helps to ensure and maintain program quality.

4. The program should show evidence of firm financial and philosophical support for involved personnel in such areas as promotion and merit pay, gas mileage, released time, adjusted teaching loads and other appropriate compensation. A well run, well supervised field program is very time consuming for faculty who are charged with supervisory tasks. Without administrative support in terms of philosophy and funding such a program would, at best, be very difficult to manage.

5. The legal status of the field students should be clear and provision for or evidence of liability insurance is desirable. The student, on-site

personnel and college/university personnel should be made aware of the legal status of field students so that all parties to the placement know exactly where their legal responsibilities lie.

Program:

1. It is desirable to have both local district coordinators and a full time college/university director share the responsibilities for designing and implementing field programs. In recognition of the extensive amount of time which must be spent on these activities, it is recommended that this function be seen as equivalent to a full load for the college/university director.

2. Field experiences should be designed to meet different objectives throughout a program--starting with career exploration in the initial experience to full-responsibility, long-term practice teaching.

3. A field experience handbook which describes the requirements and objectives of the specific program should be made available to appropriate college/university, on-site personnel and students. This is suggested as the most efficient means by which all concerned may be fully informed as to the parameters of the program.

4. Modification of program requirements should be based on the abilities of the students, the needs of the cooperating school and the university. Role responsibilities of all personnel should be jointly decided and clearly defined for all concerned.

5. An orientation session should be provided for students and on-site personnel. This will provide all concerned with an opportunity for a planned face-to-face meeting where roles, responsibilities and expectations can be openly discussed.

6. A minimum number of exploratory field experience hours should be specified for the program. A suggested minimum would be 100 hours to be completed by the end of the professional program and prior to student teaching. While no minimum number of hours necessarily ensures a quality program, a minimum is suggested to enhance the likelihood that the student will have sufficient time in which to develop and refine competencies.

7. Field experience activities should provide emphasis on the cognitive, affective and psychomotor domains as appropriate to each program, should be initiated at the freshman or sophomore year and continued throughout the student's program. Early perceptions of careers may be inaccurate. Thus students should be provided with early opportunities to test their career choices and on-going opportunities to apply knowledge gained from professional training.

8. Whether the field experience component is a part of the stated contact hours for courses and/or programs or a requirement involving additional time and receiving college credit should be clarified. Students and all personnel concerned must have a clear understanding of how the field experience component fits into the professional program.

9. The field experience should include placing the student in some "special" education situation, e.g., with mainstreamed youngsters, a "special" education class and/or gifted children when possible. Education majors need to have the opportunity to work with special students since many classrooms today contain either mainstreamed youngsters or gifted/talented pupils.

Evaluation:

1. An appropriate record keeping system should be established and maintained on student placement and performance. This is necessary to

provide for efficient and effective evaluation--both of students and of programs.

2. A pass/fail grade, providing a non-threatening field experience should be implemented. Evaluation, by both on-site and college personnel, should be directed toward the improvement of teaching behavior including oral and written communication. Self-evaluation on the part of the EFE students should be encouraged.

3. Training in supervision and evaluation techniques should include both on-site and university personnel. Such training would foster consistency in the application of supervisory and evaluative techniques so that the student receives guidance and suggestions that are not contradictory.

4. Continuous evaluation of the effectiveness of the field program should be maintained using both formal and informal assessments. Both strong programs and programs with deficiencies can benefit from continuous evaluation.

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